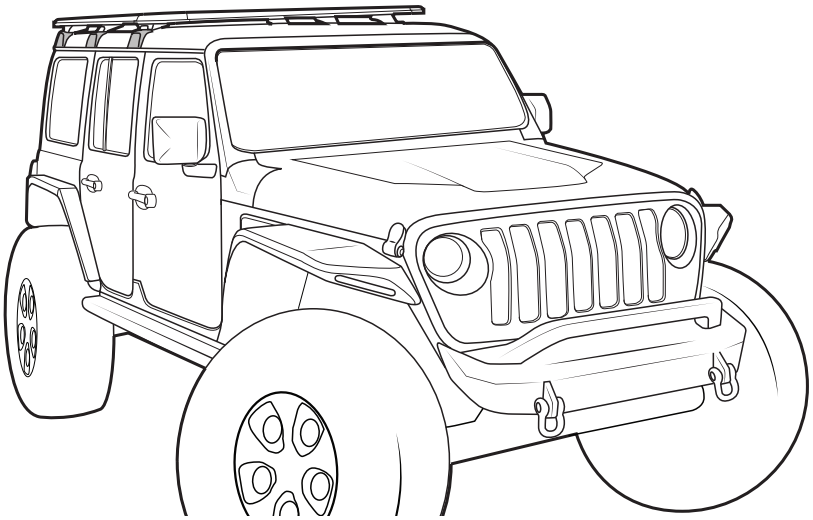
RHINO-RACK

Jeep Wrangler JL 4-Door Backbone - RJLB1

Fit Time: 2 Hour



IMPORTANT INFORMATION

Maximum carrying capacity:

Suitable Systems	On Road Cargo Allowance	Off Road Cargo Allowance	Static Allowance	Roof Allowance	Rack Weight
42108B	**86.5kg / 191lbs**	**62.5kg / 138lbs**	326.5kg / 720lbs	**120kg / 265lbs**	33.5kg / 74lbs
45108B	**81kg / 179lbs**	**57kg / 126lbs**	321kg / 708lbs		39kg / 86lbs
3 Crossbars	**99.5 / 219lbs**	**79kg / 174lbs**	339.5kg / 748lbs		20.5kg / 45lbs

Off Road: Any driven path taken that is not on sealed (tarred / bitumen) and maintained
Roof Allowance: Total permissible weight attached to the roof of the car. This is inclusive of the weight of the roof rack system
Cargo Allowance: Total permissible weight allowed on top, and attached to roof racks whilst the vehicle is in motion
Static Allowance: Total permissible weight allowed on top, and attached to roof racks whilst the vehicle is stationary
Load must be evenly distributed over the entire Pioneer. Weight of roof rack accessories is to be included in cargo allowance.

Torque settings
Unless stated otherwise in these instructions, all fasteners should be set to the following torque settings -
M6: 4-5Nm (3-4lbs/ft), M8: 8-10Nm (6-7.5lbs/ft) and M10: 16-18Nm (12-13lbs/ft).

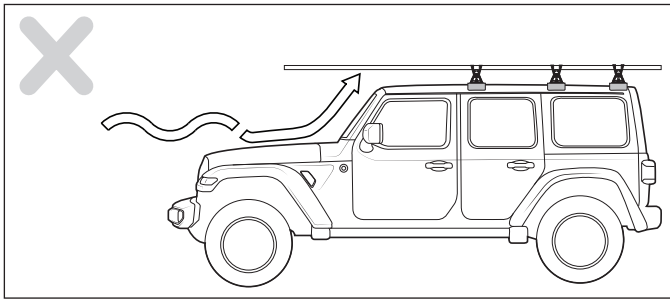
Warning:

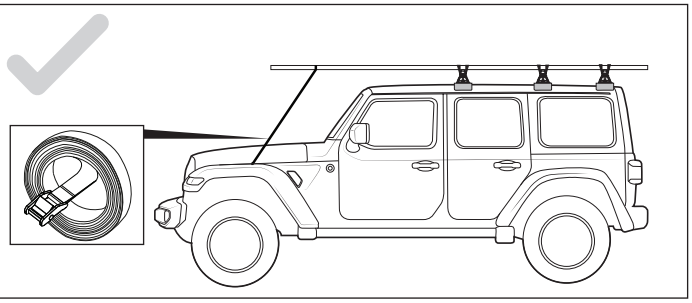
- Check the Rhino-Rack website to ensure you have the latest issue of the instructions
- Check Part No. and / or Kit is correct for use with your vehicle
- Do not attempt to fit the rack system to your vehicle unless you fully understand these fitting instructions. Please direct any questions regarding fitting to the dealer from where the roof racks were purchased.
- **Use only non-stretch fastening ropes or straps.**
- The handling characteristics of the vehicle changes when you transport a load on the roof. For safety reasons we recommend you exercise extreme care when transporting wind-resistant loads. Special consideration must be taken into account when cornering and braking.
- Although the system is tested and approved to AS1235-2000 / ISO 11154, off-road conditions can be much more rigorous. Extreme care must be taken in off road conditions

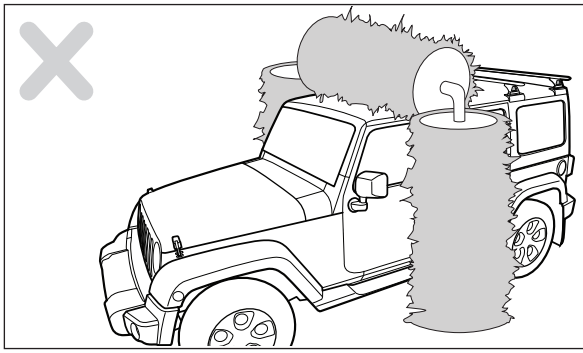
Recommendations:
It is essential that all bolt connections be checked after driving a short distance when you first install your roof racks. Bolt connections should be checked again at regular intervals (once a week is enough, depending on road conditions, usage, loads and distances travelled). You should also check the roof racks each time they are re-fitted. Always make sure to fasten your load securely. Please also ensure that all loads are evenly distributed and that the centre of gravity is kept as low as possible and must be entirely contained within the extents of the roof racks.

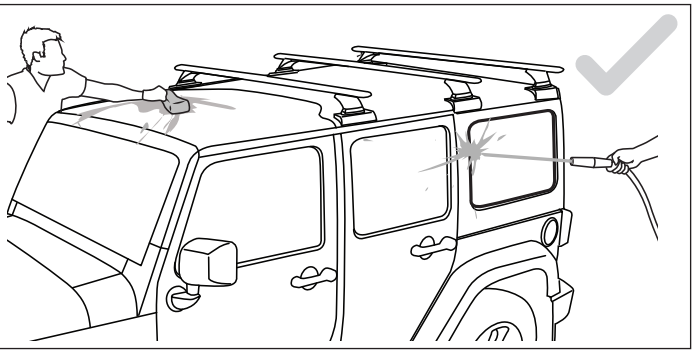
Note for Dealers and Fitters:
It is your responsibility to ensure these fitting instructions are given to the end user or client.

Jeep Wrangler JL 4-Door - RJLB1

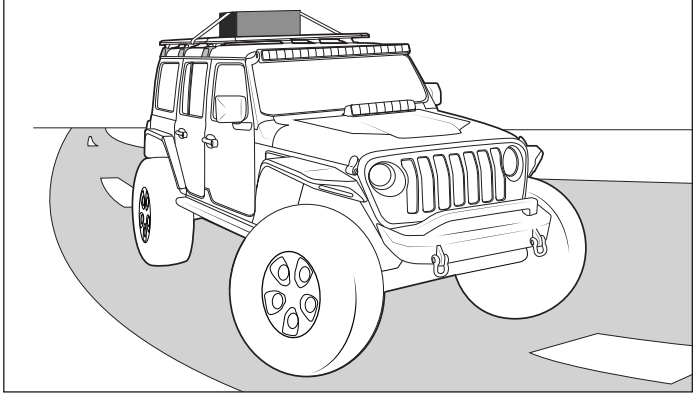




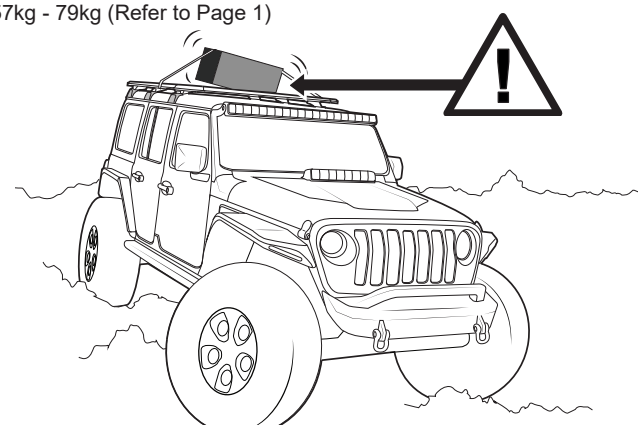




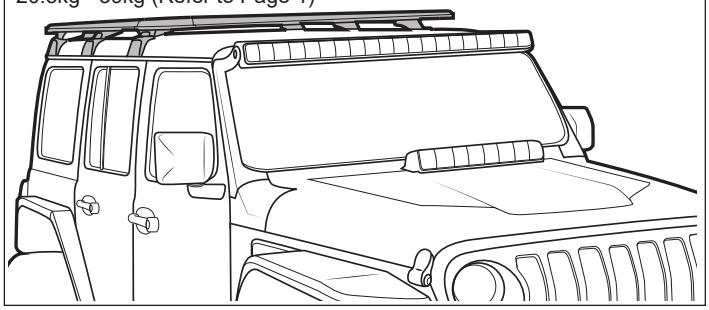
On Road Cargo Allowance:
81kg - 99.5kg (Refer to Page 1).

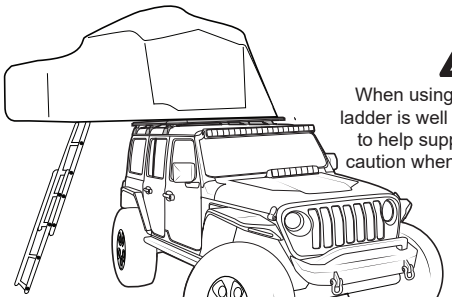


Off-Road Cargo Allowance:
57kg - 79kg (Refer to Page 1)



System Weight:
20.5kg - 39kg (Refer to Page 1)



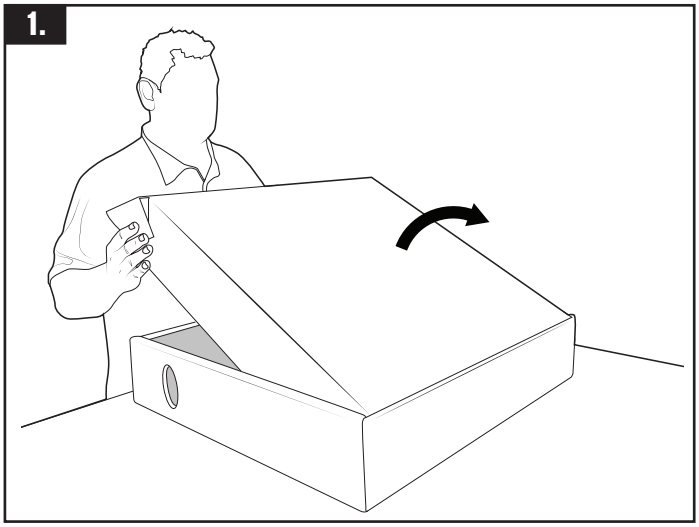


When using a roof top tent, ensure ladder is well supported on the ground to help support tent. Take extreme caution when climbing heights above 1.2m/4ft.

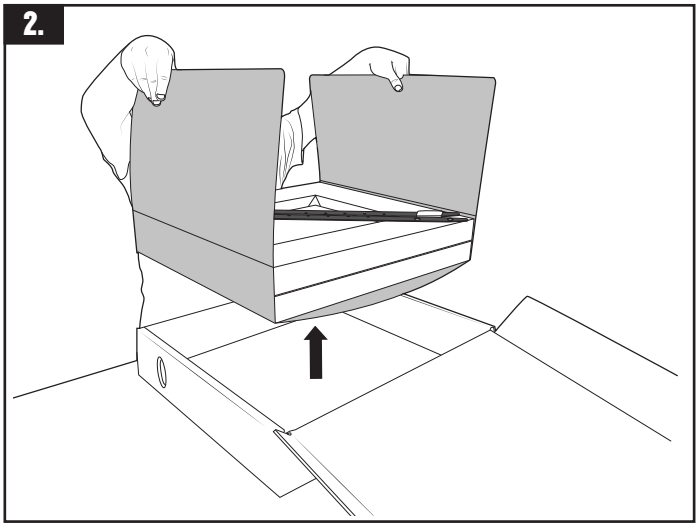
Jeep Wrangler JL 4-Door - RJLB1

Prepare for Assembly. Prepararse para el montaje

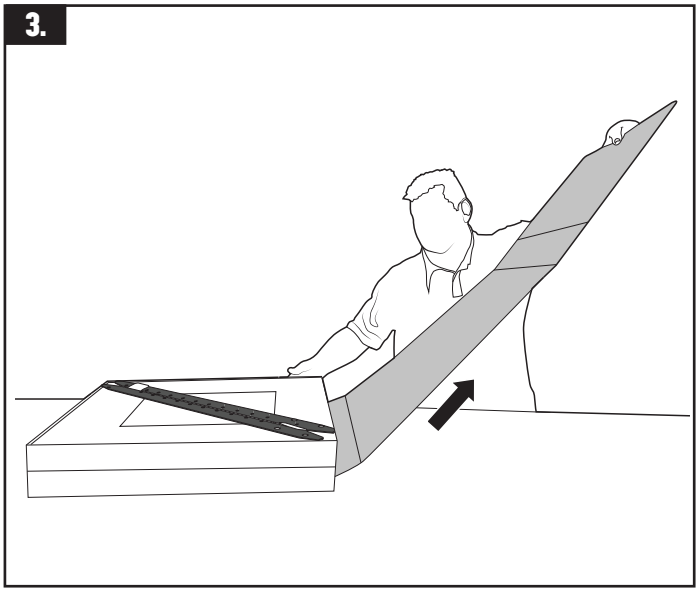
1.



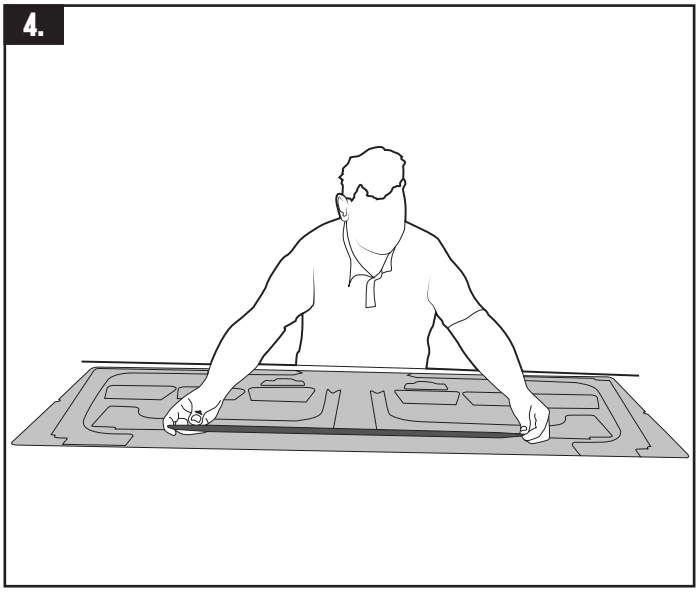
2.

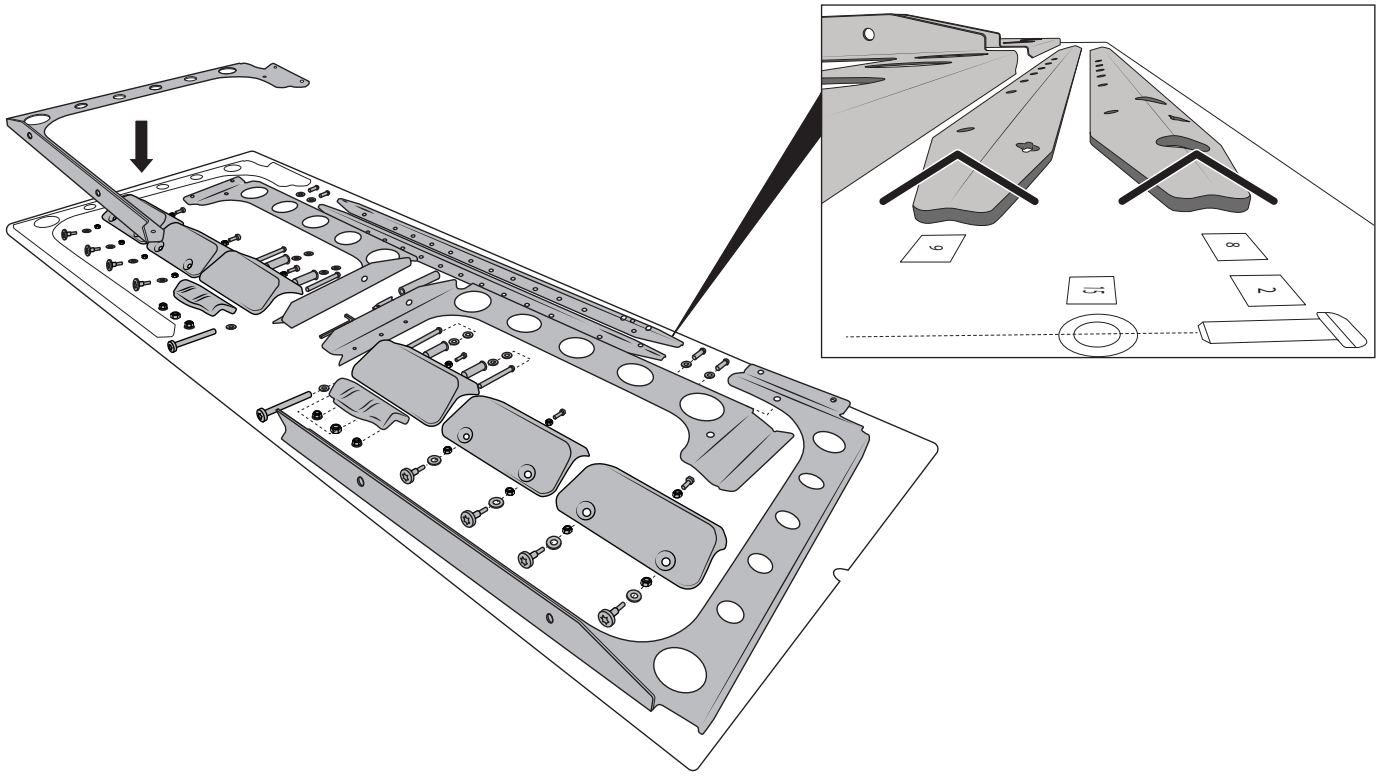


3.



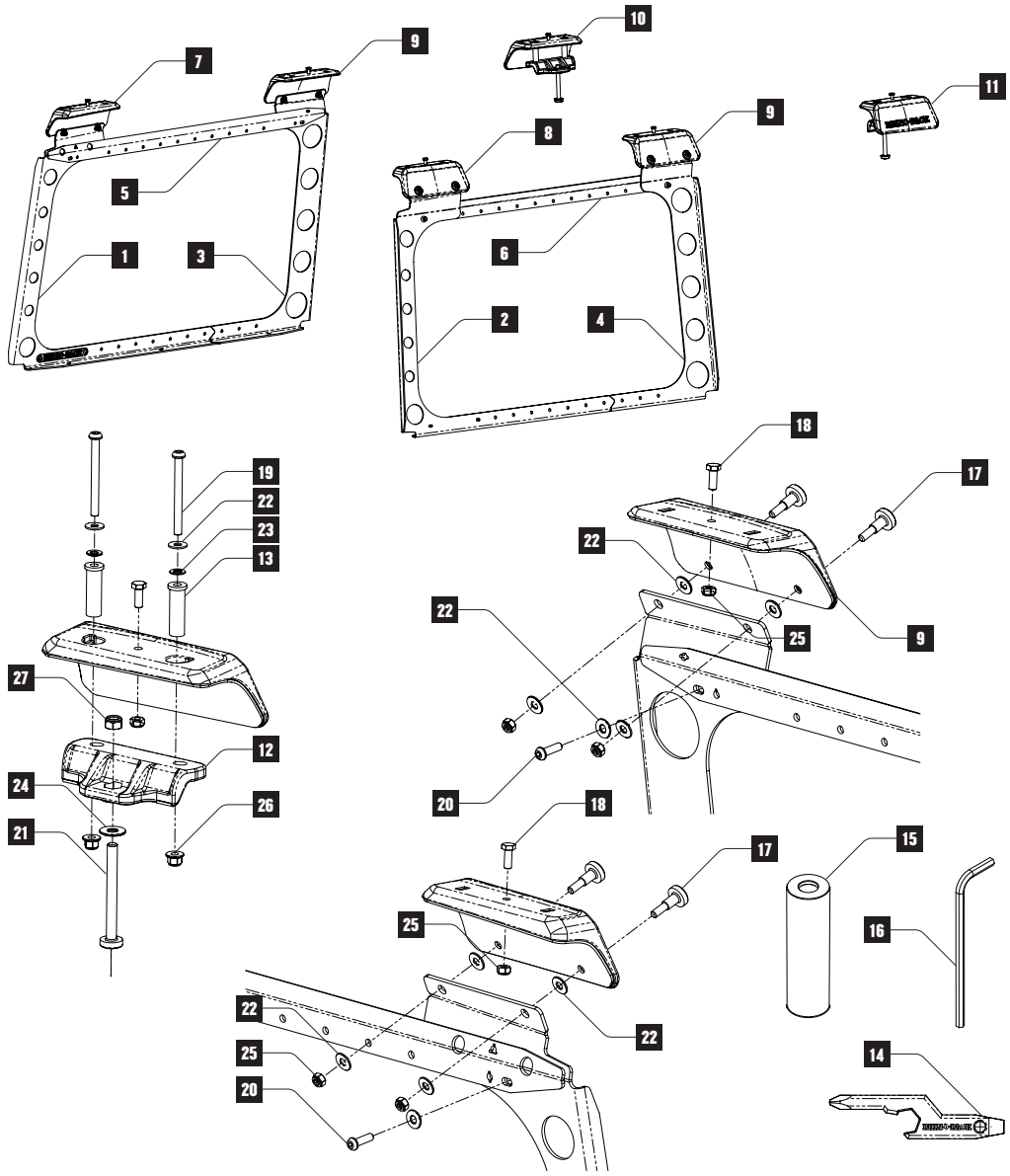
4.





Jeep Wrangler JL 4-Door - RJLB1

PARTS LIST

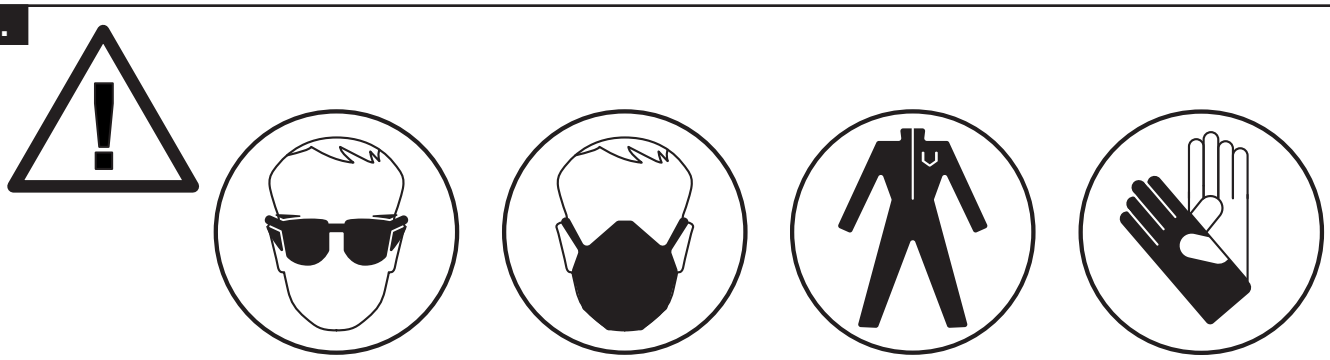


ITEM	DESCRIPTION	QTY	PART NO.
1	REAR LEFT UPRIGHT	1	CA1943
2	REAR RIGHT UPRIGHT	1	CA1942
3	FRONT LEFT UPRIGHT	1	CA1945
4	FRONT RIGHT UPRIGHT	1	CA1944
5	LEFT HORIZONTAL	1	CA1947
6	RIGHT HORIZONTAL	1	CA1946
7	REAR LEFT CASTING	1	SUB0808
8	REAR RIGHT CASTING	1	SUB0809
9	MIDDLE CASTING	2	SUB0807
10	FRONT LEFT CASTING	1	SUB0806
11	FRONT RIGHT CASTING	1	SUB0805
12	ROLLBAR CASTING	2	SUB0804
13	SPACER BUSHING	4	CA1939
14	SPACER MULTITOOL	1	CA1957
15	12.5MM DRILL STOP	1	CA1958
16	4MM ALLEN KEY	1	H049
17	M6 T50 SHOULDER BOLT	8	B276-BLK
18	M6 X 16 HEX BOLT	6	B168
19	M6 X 65 DOMEHEAD BOLT	4	B274-BLK
20	M6 X 20 DOMEHEAD BOLT	4	B277-BLK
21	M8 X 80 T50 DOMEHEAD BOLT	2	B275-BLK
22	M6 X 16 FLAT WASHER	24	W031-BLK
23	M6 RUBBER WASHER	4	W070
24	M8 X 21 FLAT WASHER	2	W020-BLK
25	M6 NYLOC NUT	8	N069-BLK
26	M6 FLANGED NYLOC NUT	4	N081-BLK
27	M8 NYLOC NUT	-	N043-BLK
28	INSTRUCTIONS	1	R1823

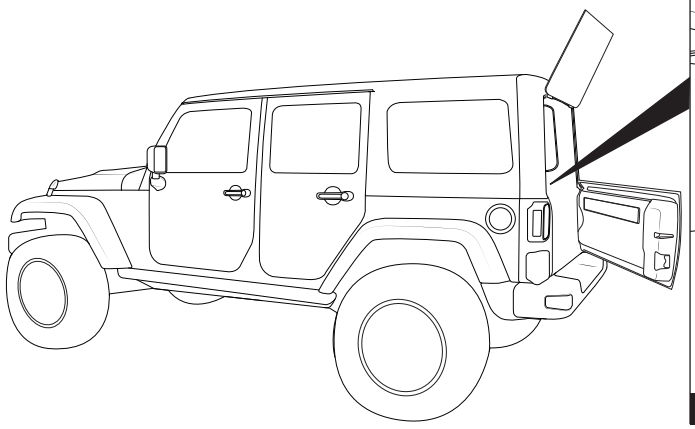
ITEM	TOOLS REQUIRED
A	POWER DRILL
B	12.5MM - 1/2" DRILL BIT
C	6MM - 1/4" DRILL BIT
D	8.5MM - 5/16" DRILL BIT
E	VACUUM
F	BUTYL MASTIC
G	T50 BIT (SUPPLIED WITH JEEP RATCHET TOOL)
H	PERSONAL PROTECTIVE EQUIPMENT

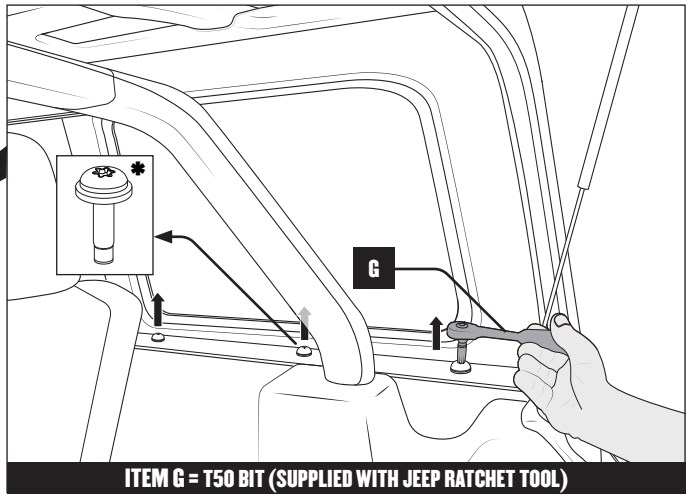
Jeep Wrangler JL 4-Door - RJLB1

1.



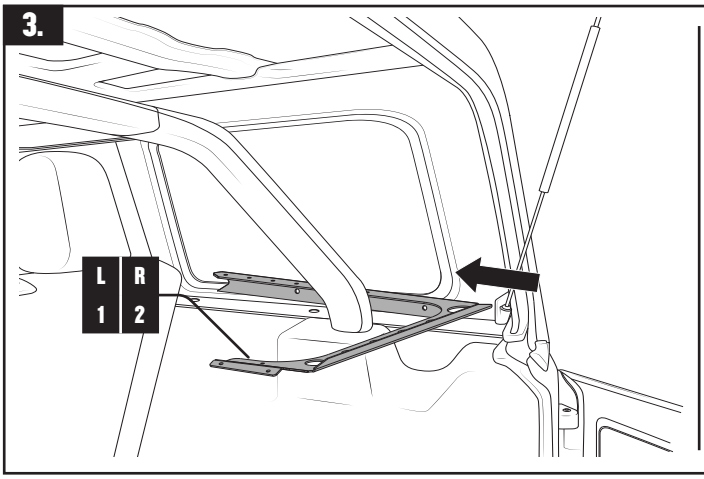
2.

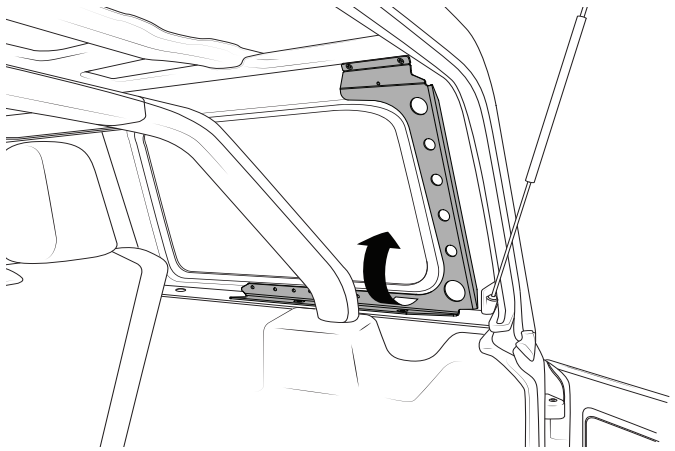




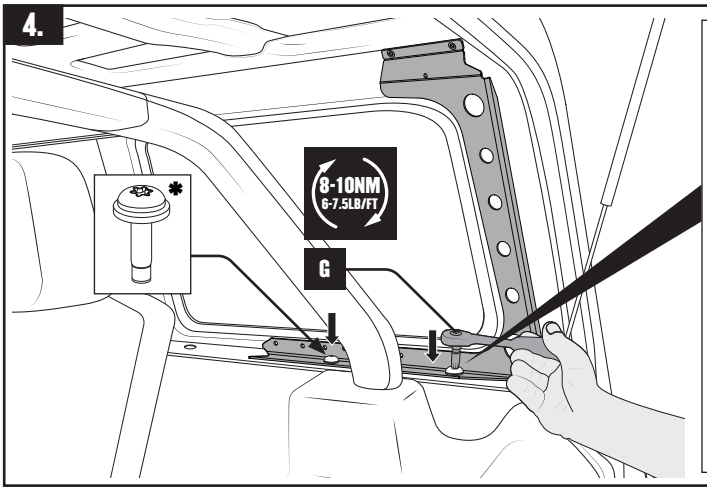
ITEM G = T50 BIT (SUPPLIED WITH JEEP RATCHET TOOL)

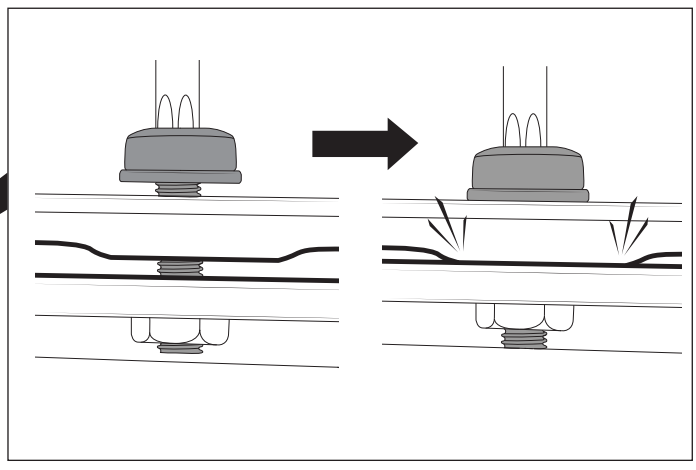
3.





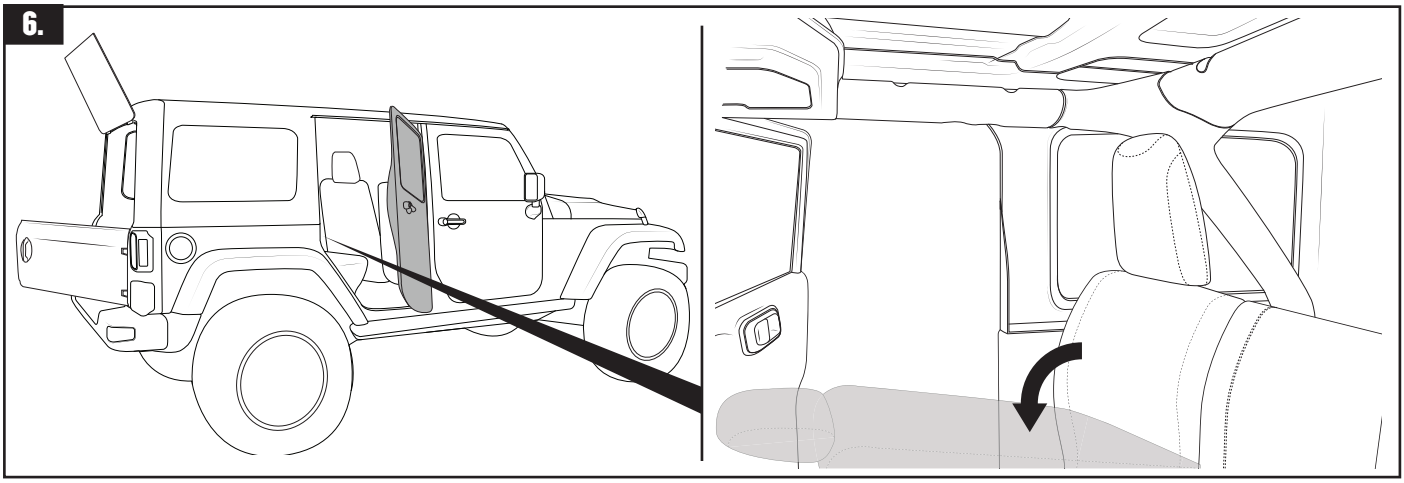
4.



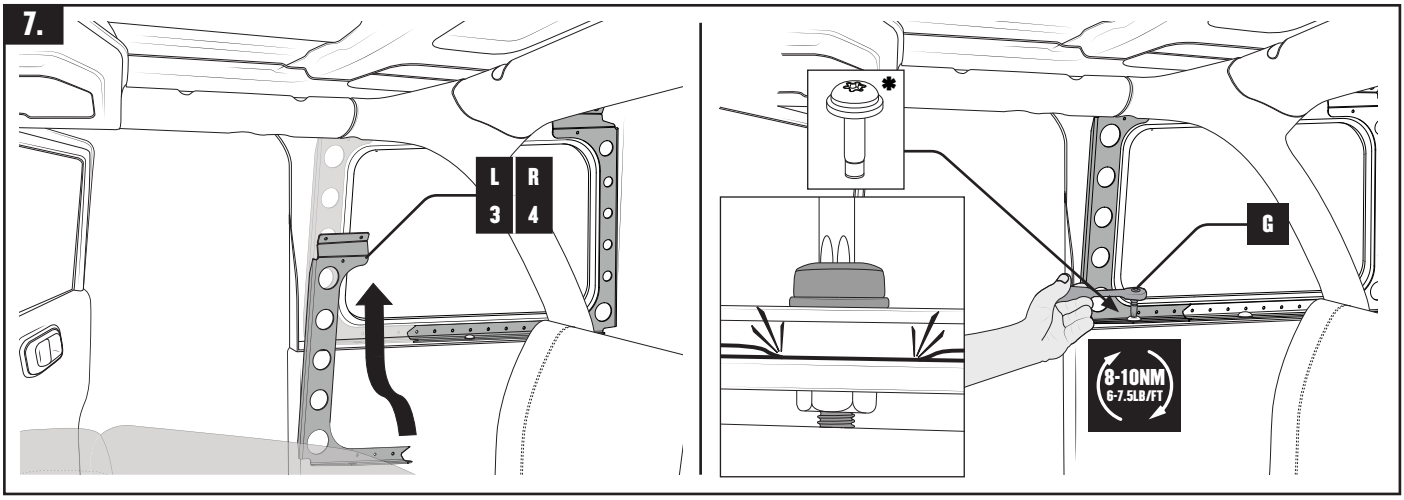


Jeep Wrangler JL 4-Door - RJLB1

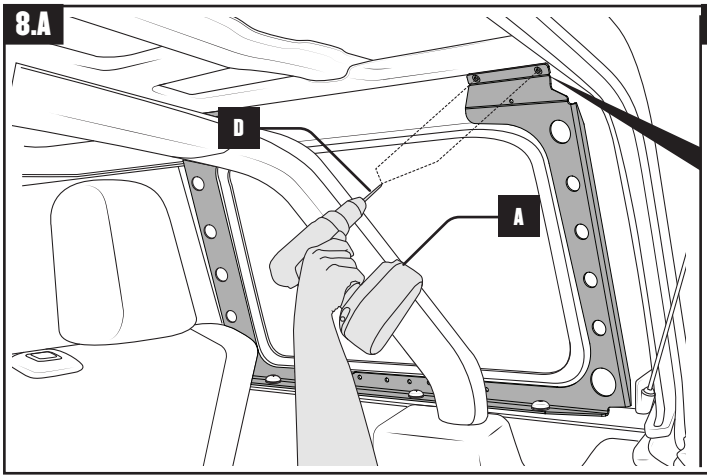
6.



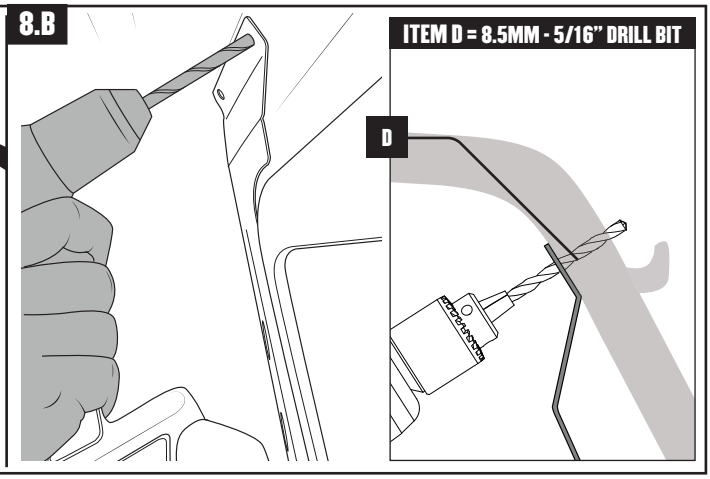
7.



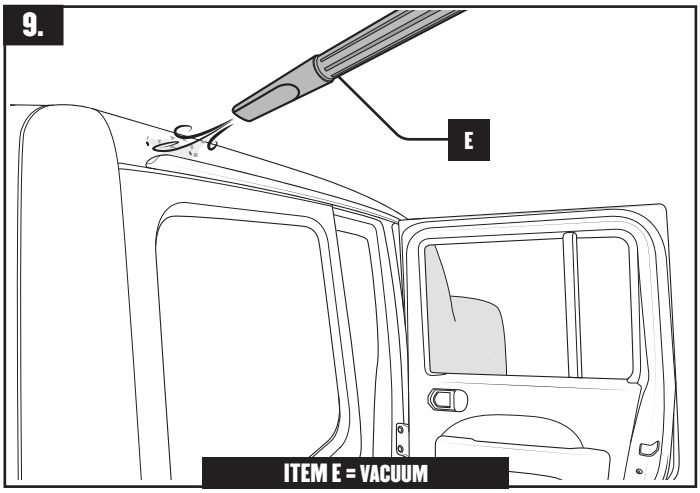
8.A



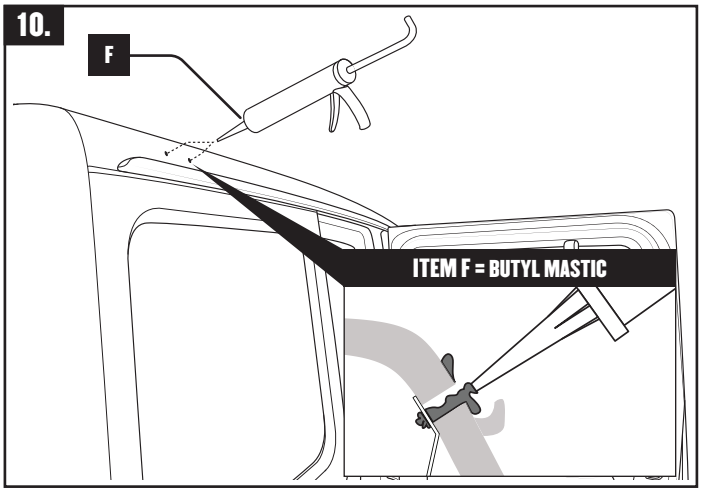
8.B



9.

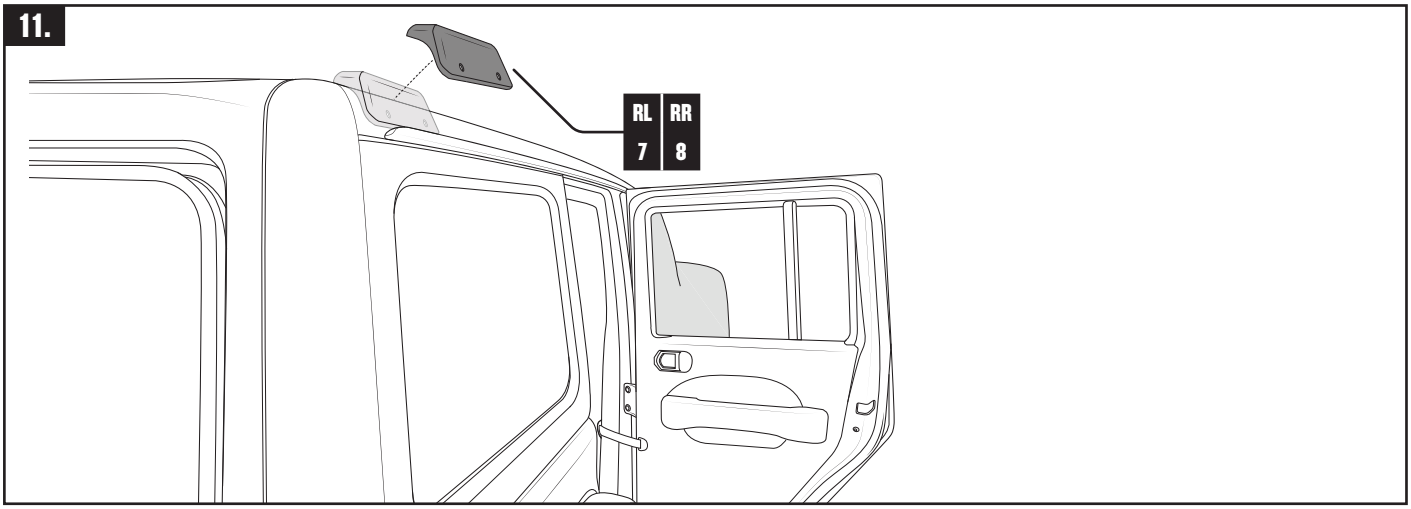


10.

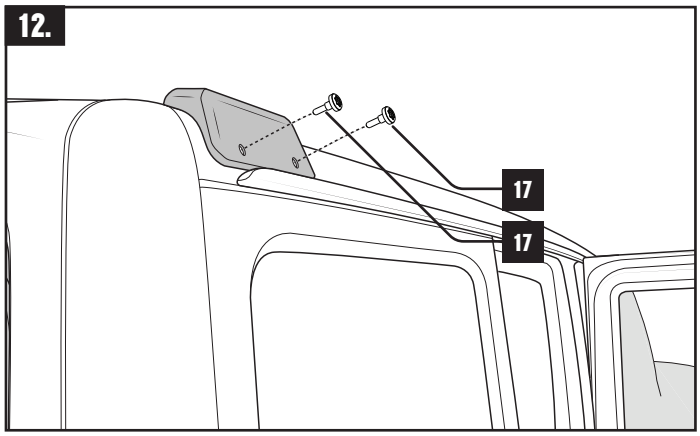


Jeep Wrangler JL 4-Door - RJLB1

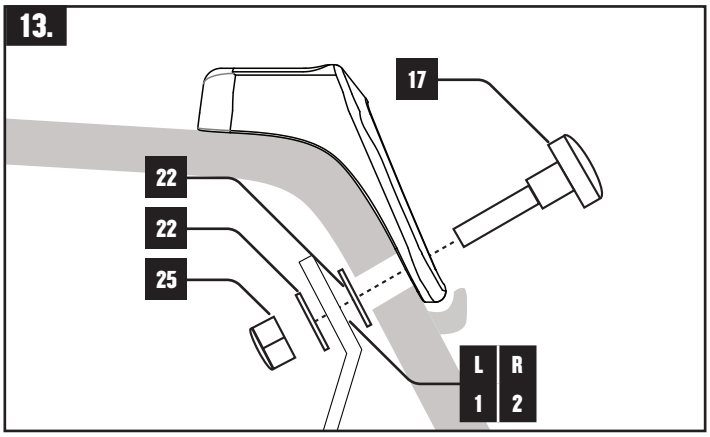
11.



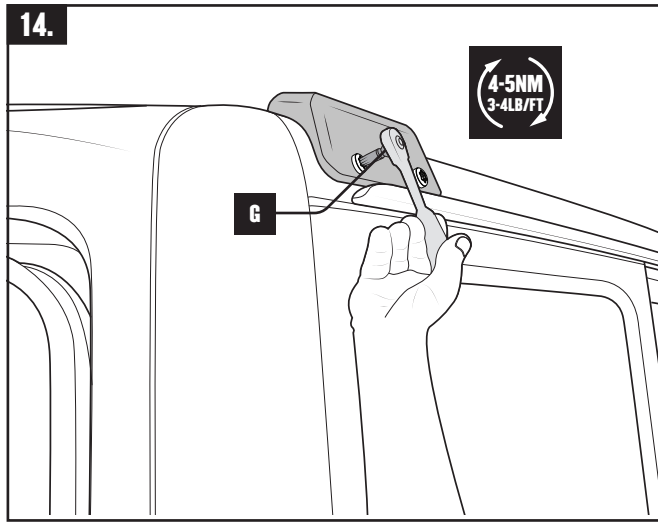
12.

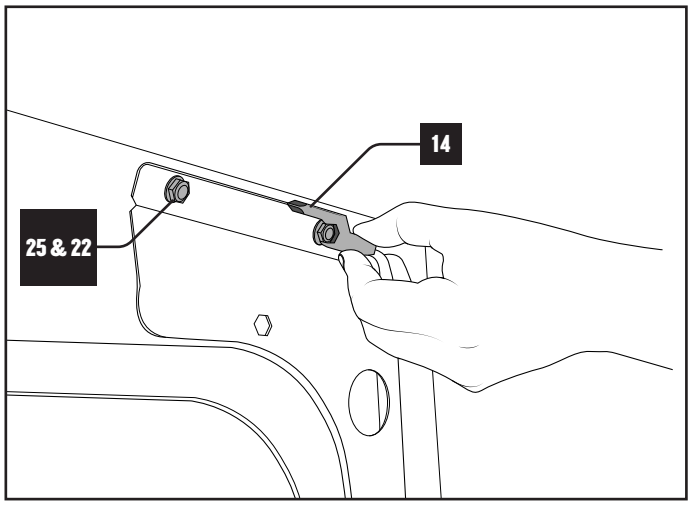


13.

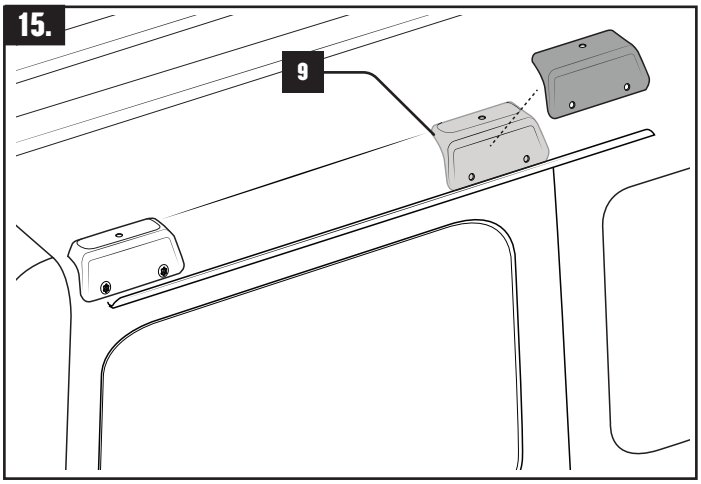


14.

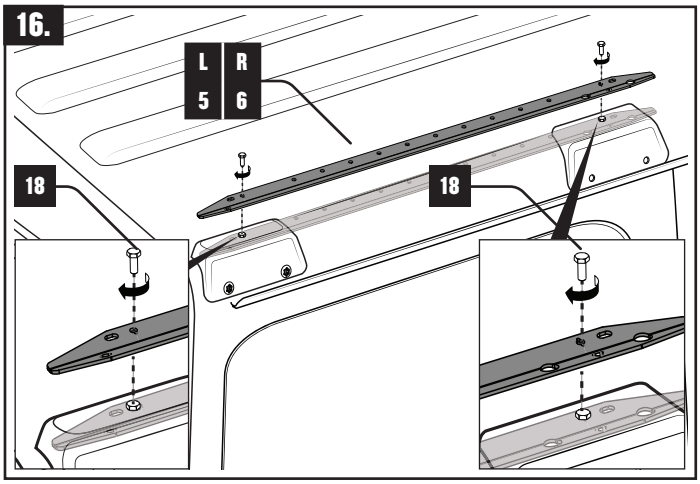




15.

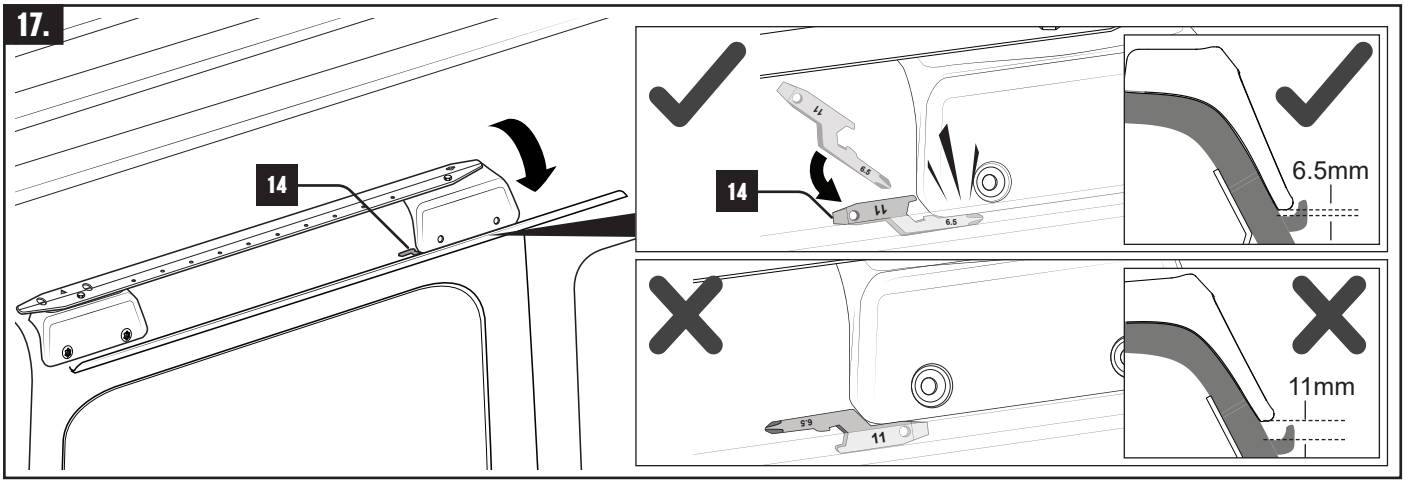


16.

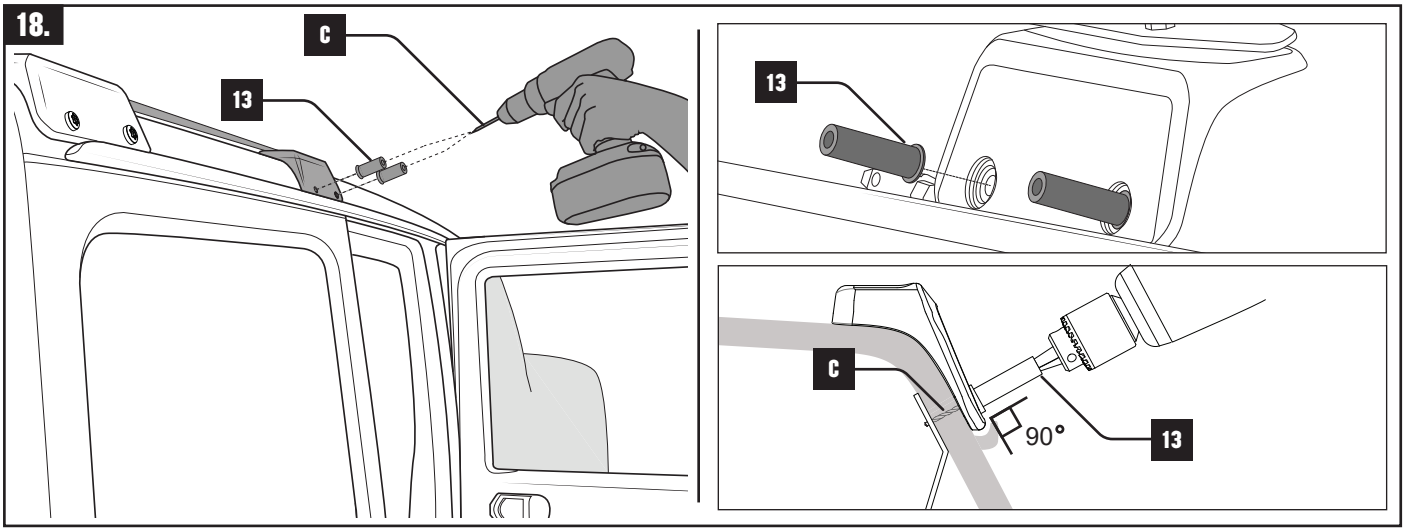


Jeep Wrangler JL 4-Door - RJLB1

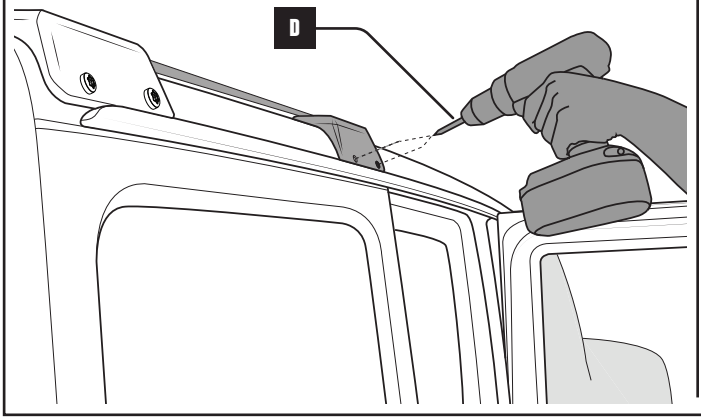
17.



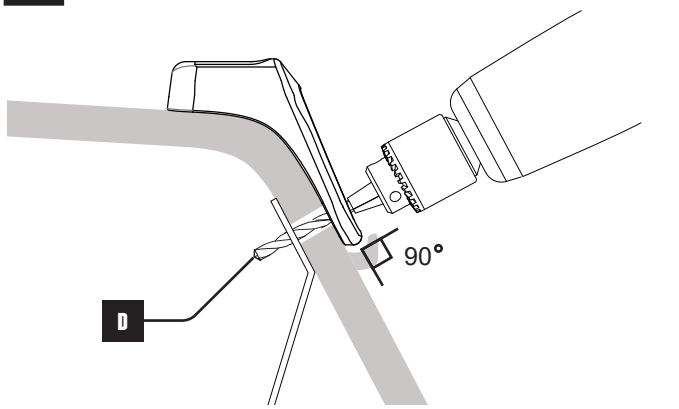
18.



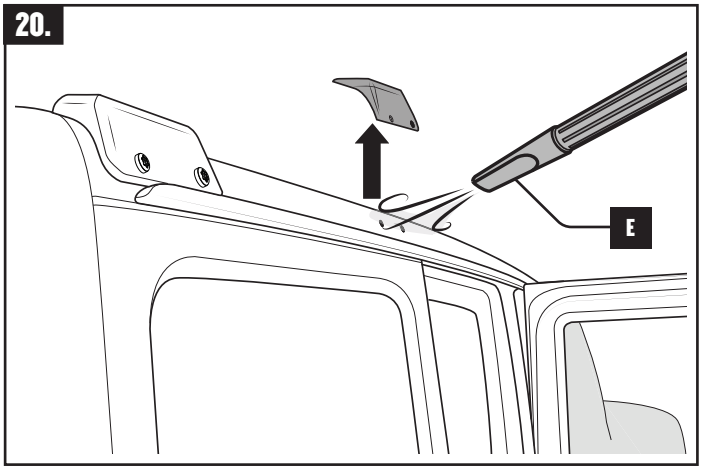
19.A



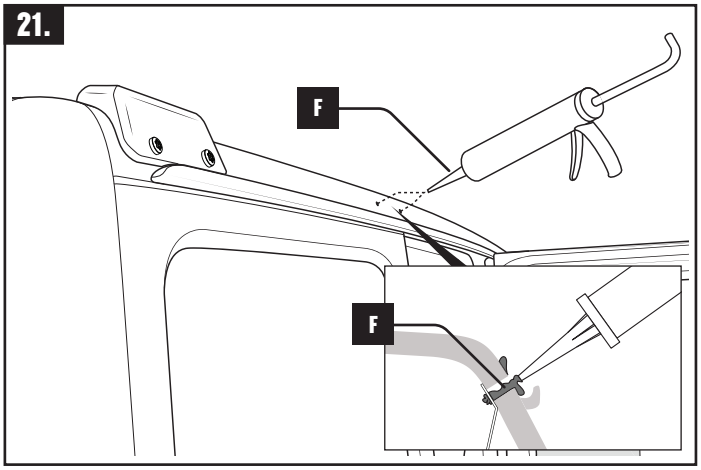
19.B



20.

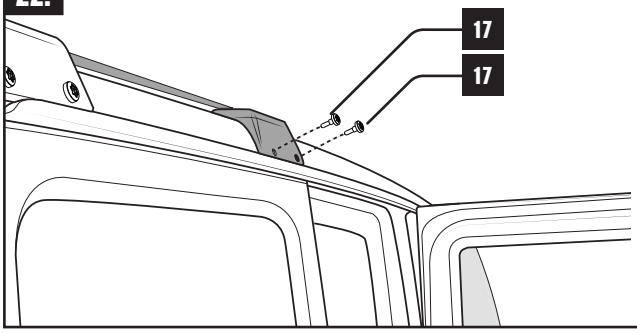


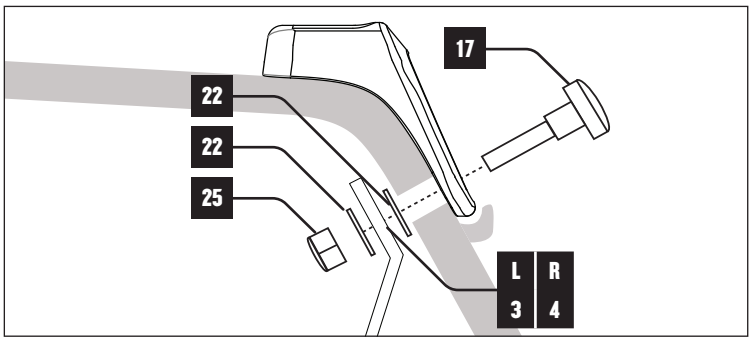
21.



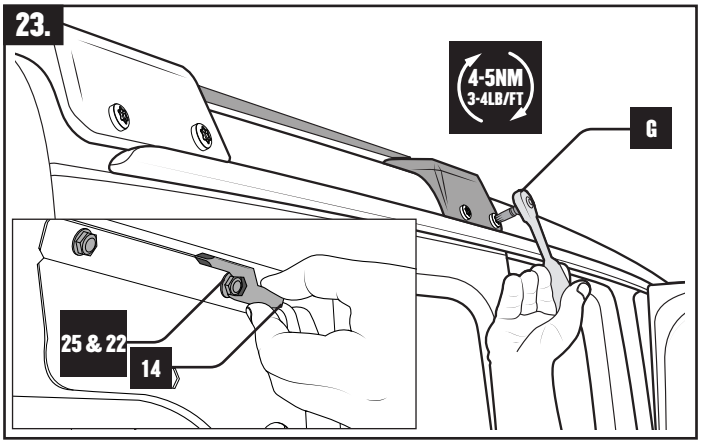
Jeep Wrangler JL 4-Door - RJLB1

22.

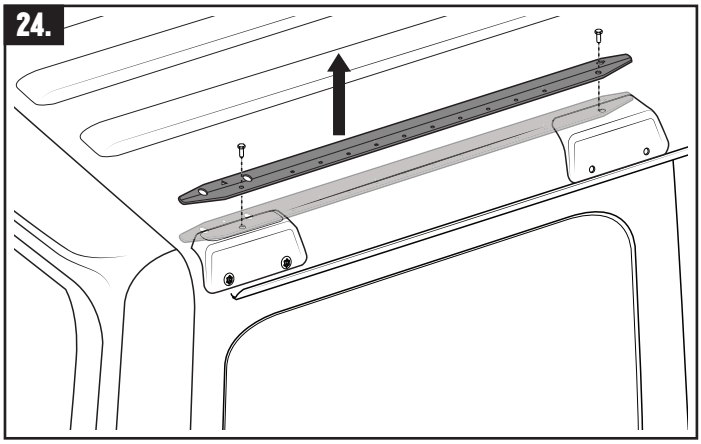




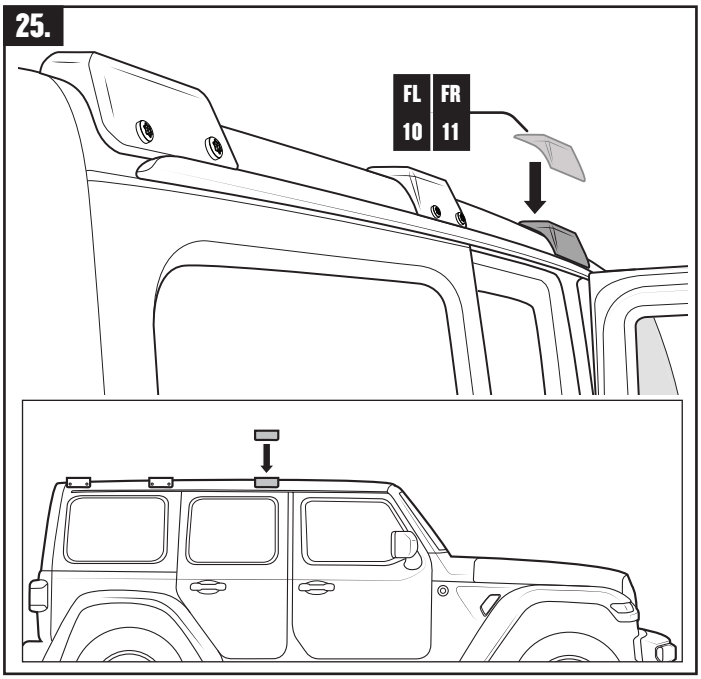
23.



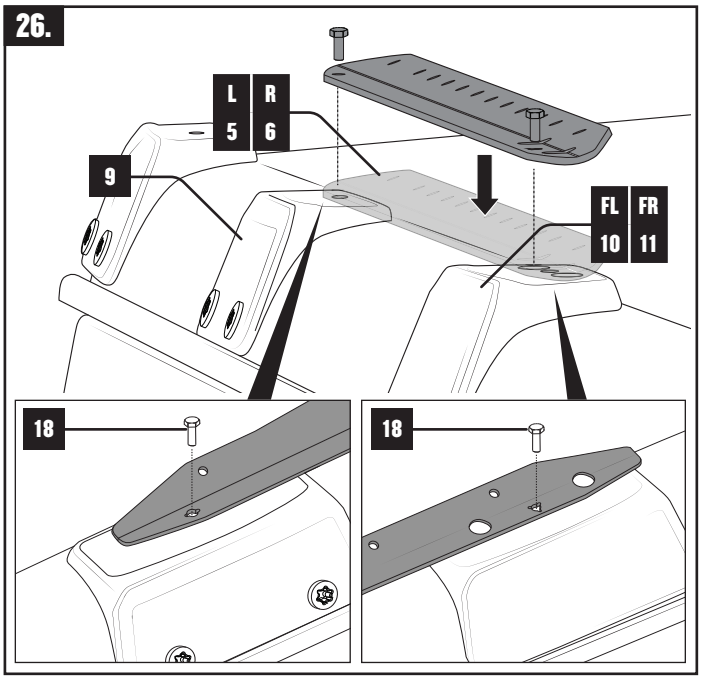
24.



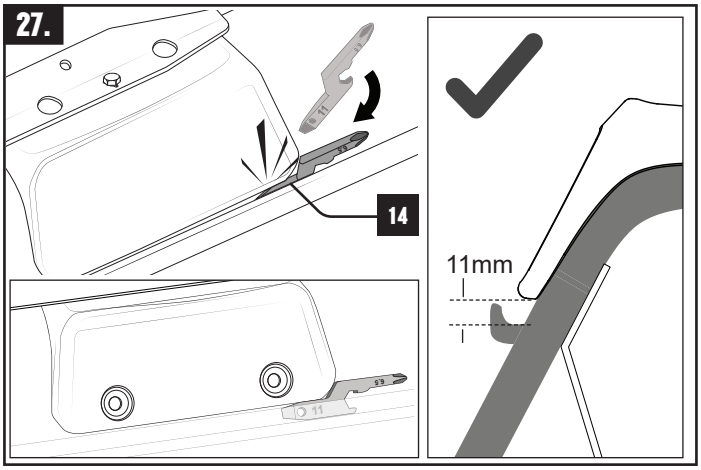
25.



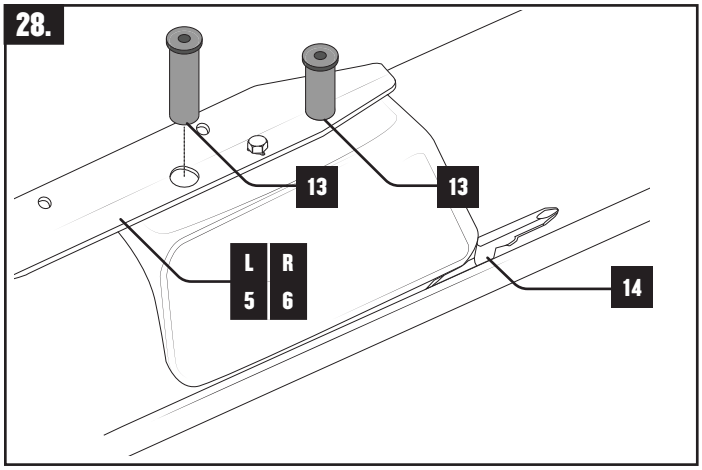
26.



27.

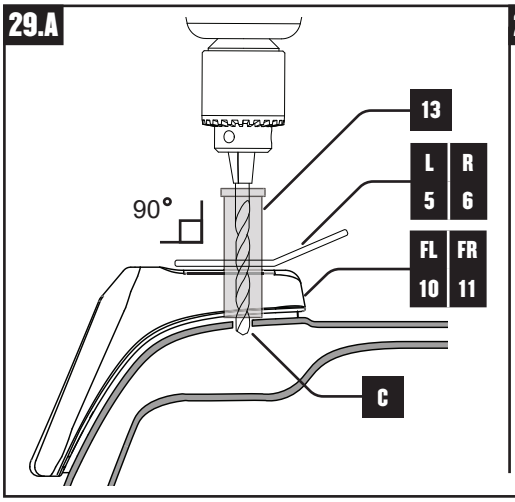


28.

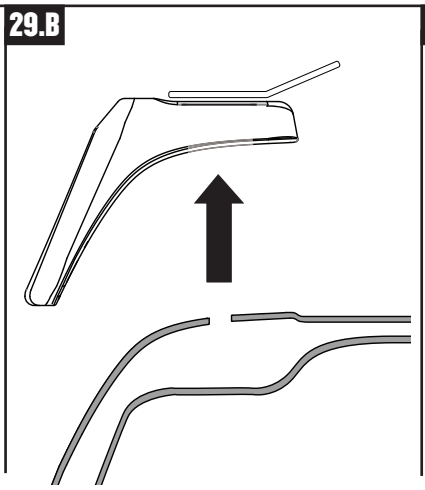


Jeep Wrangler JL 4-Door - RJLB1

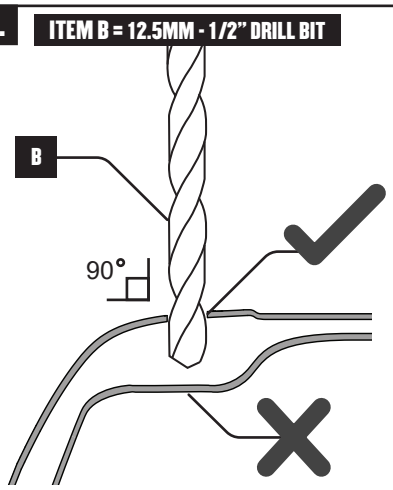
29.A



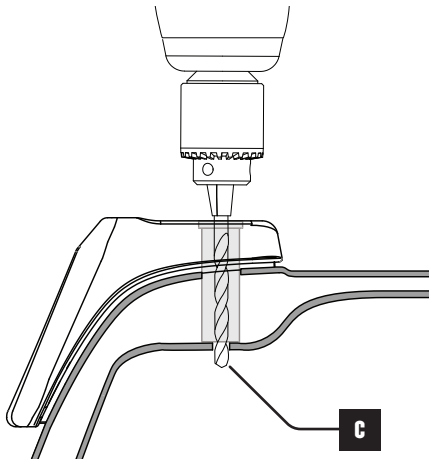
29.B



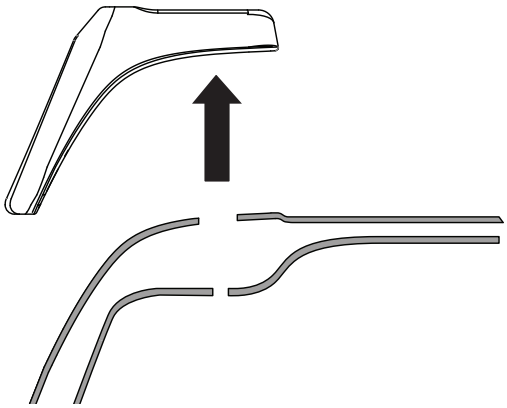
29. ITEM B = 12.5MM - 1/2" DRILL BIT



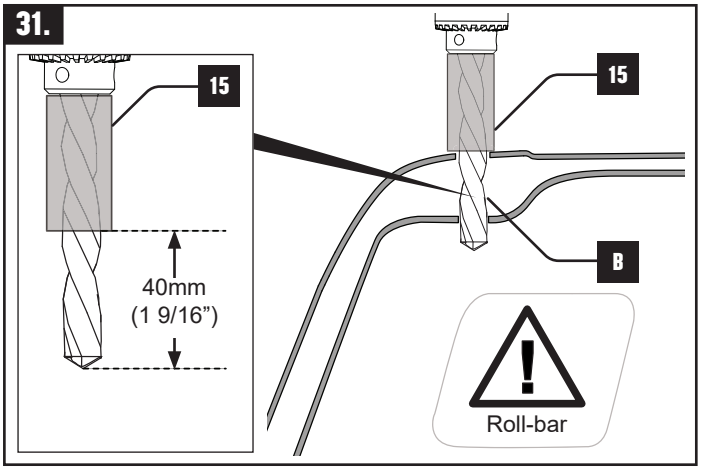
30.A



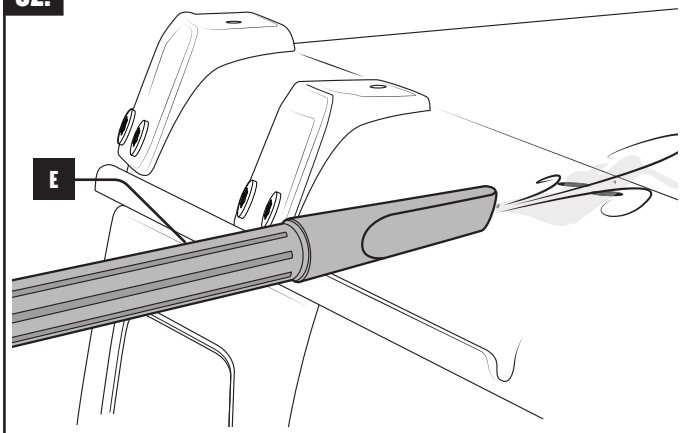
30.B



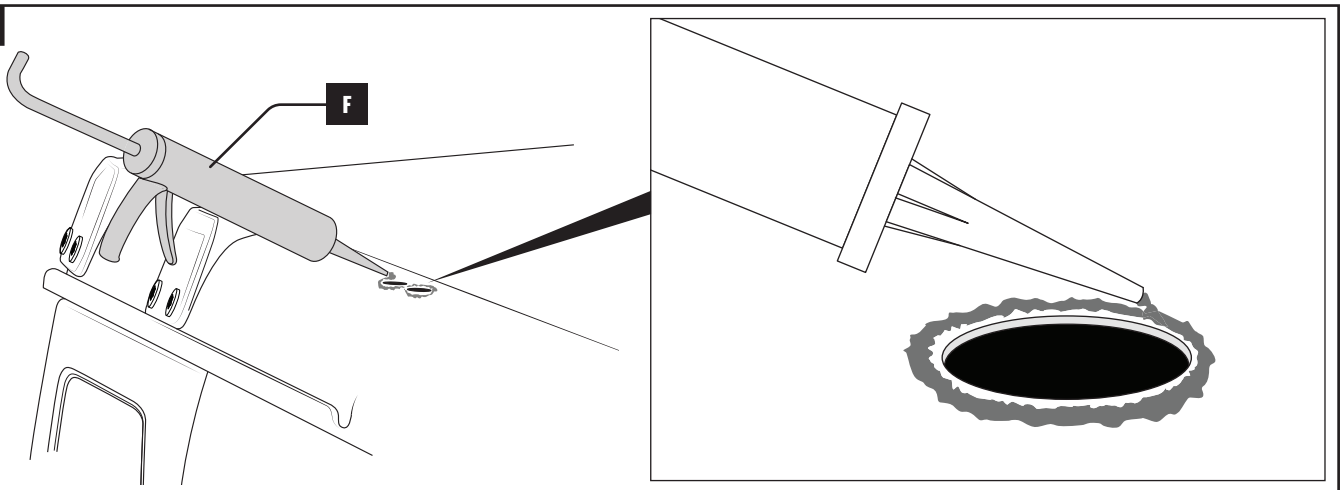
31.



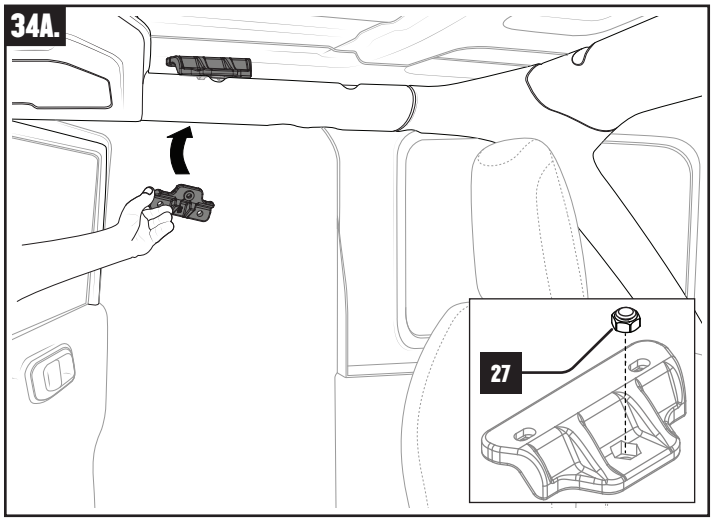
32.

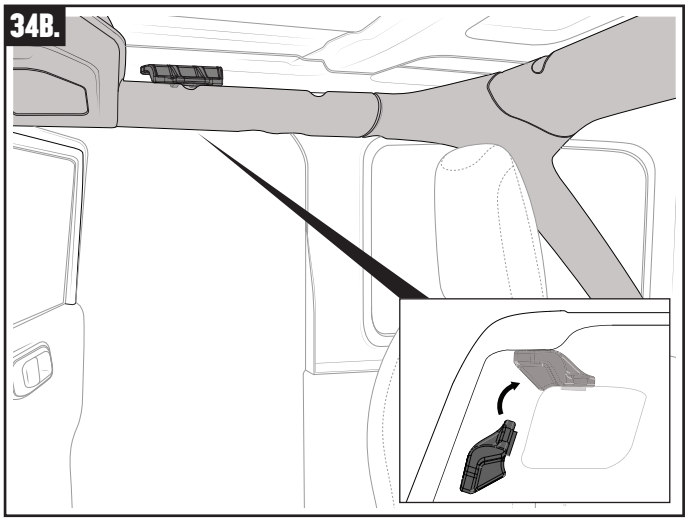


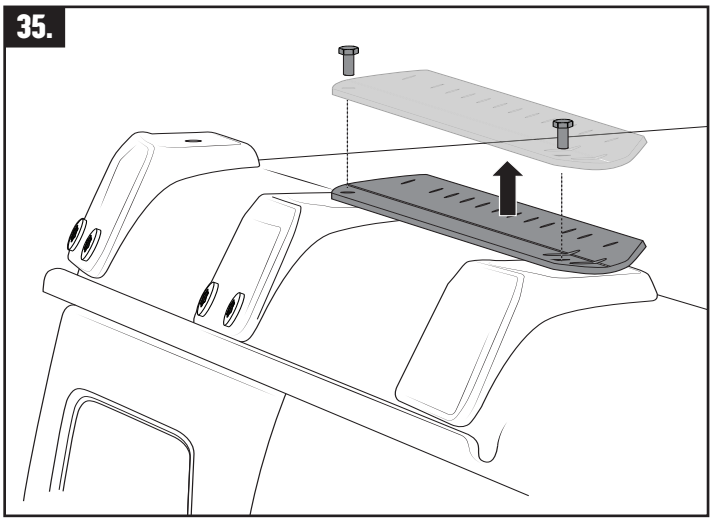
33.

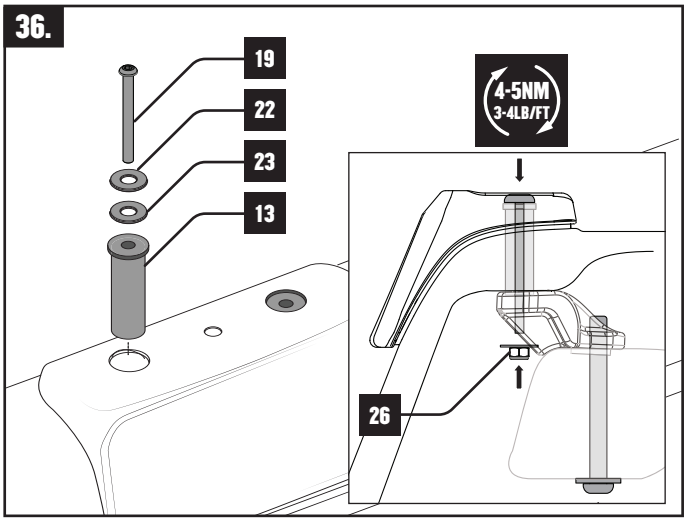


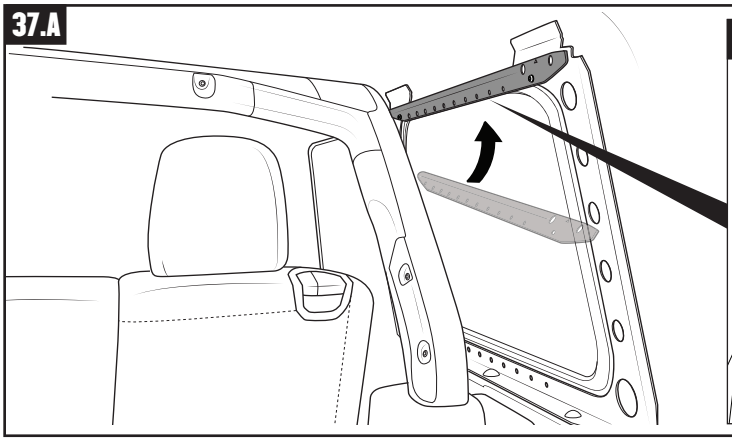
Jeep Wrangler JL 4-Door - RJLB1

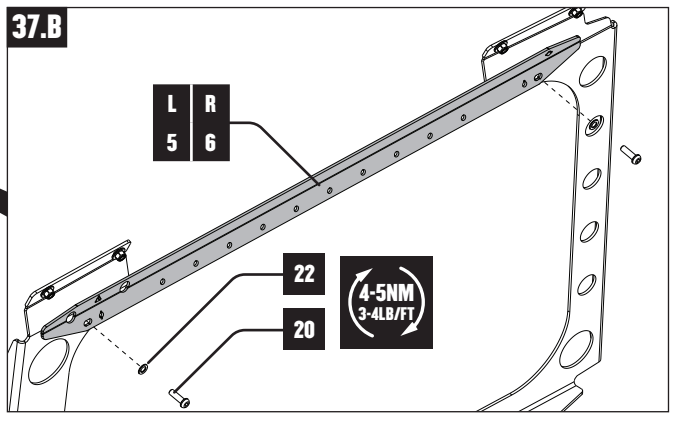


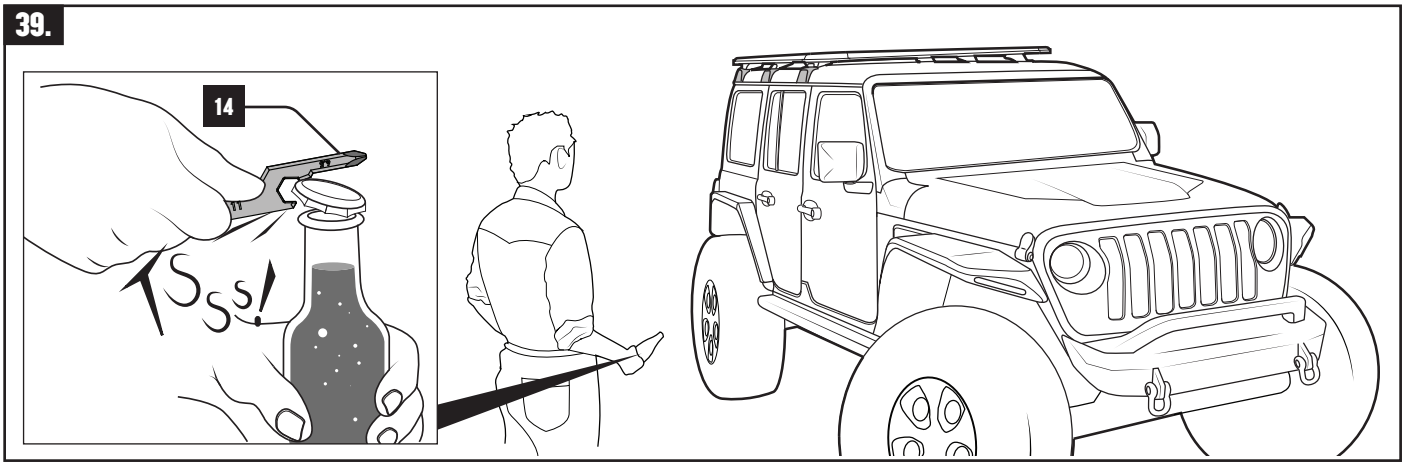








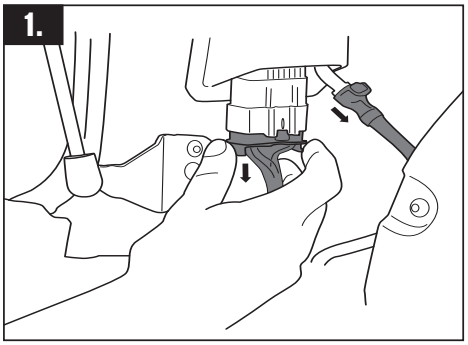




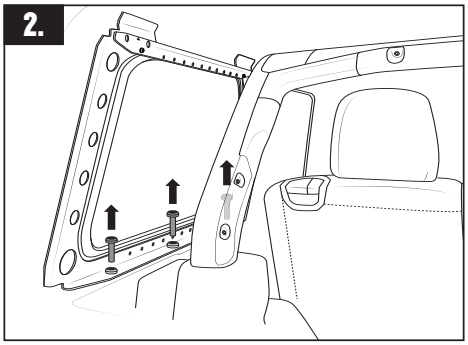
Jeep Wrangler JL 4-Door - RJLB1

REMOVING CANOPY AFTER BACKBONE FITMENT

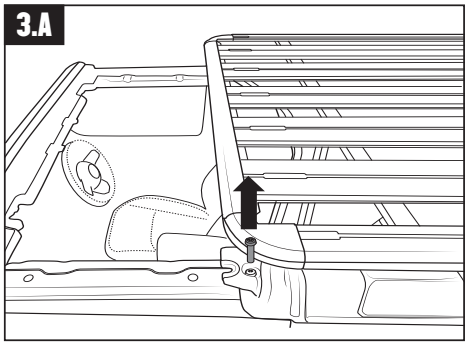
1.



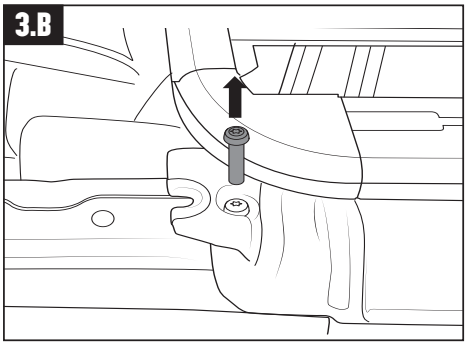
2.



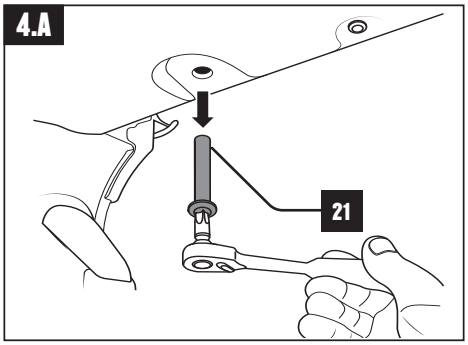
3.A



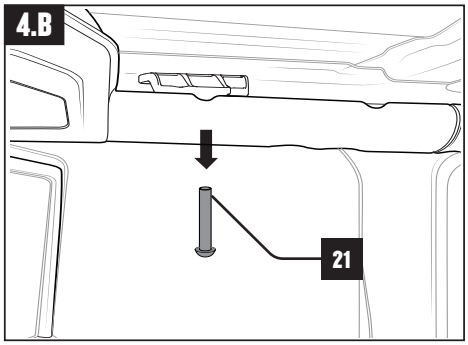
3.B



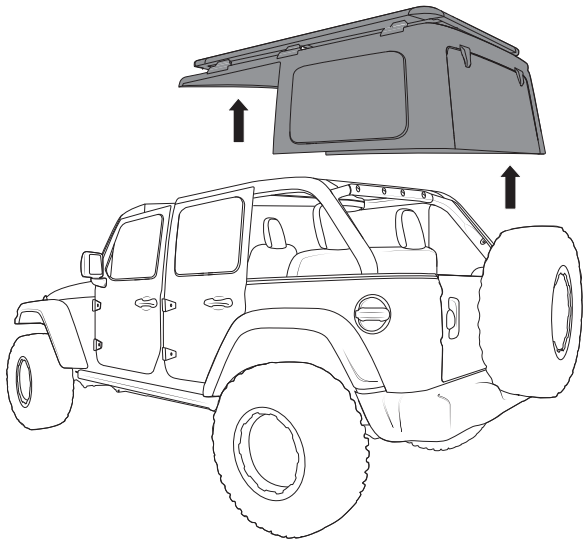
4.A



4.B

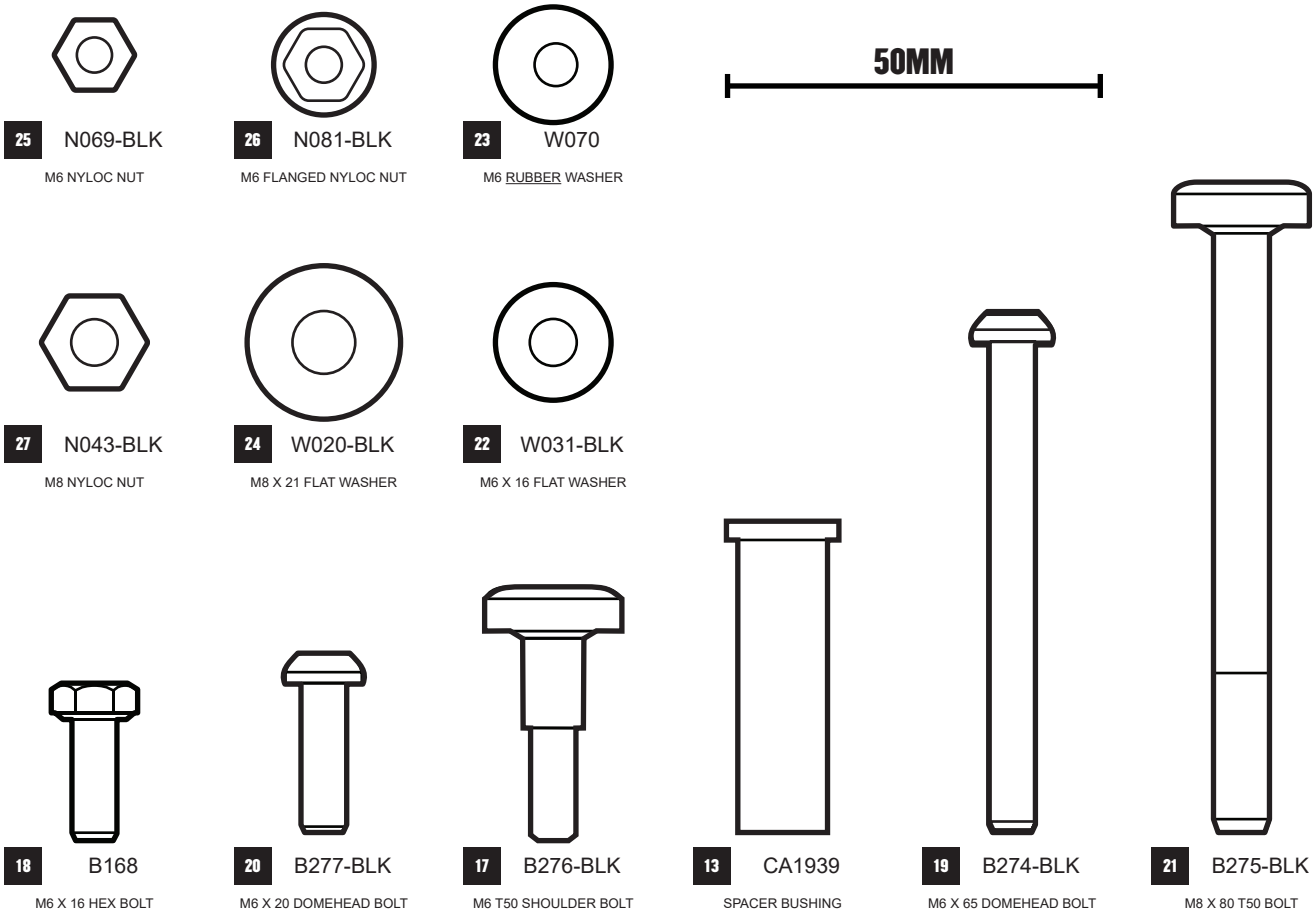


5.



Jeep Wrangler JL 4-Door - RJLB1

1:1 HARDWARE IDENTIFICATION CHART



25 N069-BLK
M6 NYLOC NUT

26 N081-BLK
M6 FLANGED NYLOC NUT

23 W070
M6 RUBBER WASHER

27 N043-BLK
M8 NYLOC NUT

24 W020-BLK
M8 X 21 FLAT WASHER

22 W031-BLK
M6 X 16 FLAT WASHER

18 B168
M6 X 16 HEX BOLT

20 B277-BLK
M6 X 20 DOMEHEAD BOLT

17 B276-BLK
M6 T50 SHOULDER BOLT

13 CA1939
SPACER BUSHING

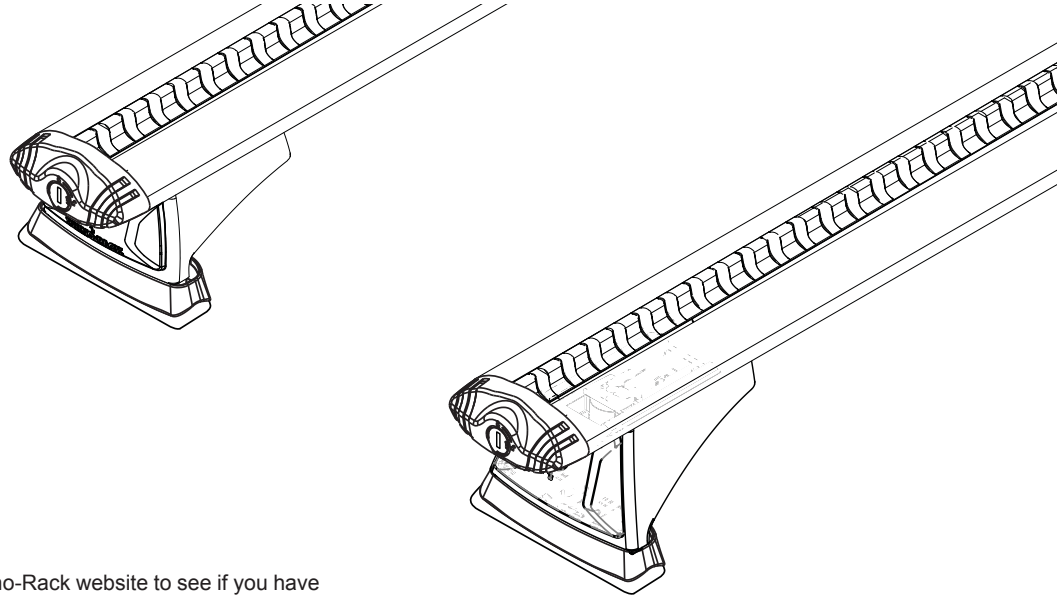
19 B274-BLK
M6 X 65 DOMEHEAD BOLT

21 B275-BLK
M8 X 80 T50 BOLT

RHINO-RACK

RCL, RCH 2,4,6 Kits

Important: Please read these instructions carefully prior to installation.
Please refer to your fitting instruction to ensure that the Roof Rack System is installed in the correct location.
Check the contents of kit before commencing fitment and report any discrepancies.
Place these instructions in the vehicle's glove box after installation is complete.



Note: Be sure to check Rhino-Rack website to see if you have the latest version of instructions before beginning installation.

Maximum load carrying capacity: 100kg / 220lbs

Important Information

1. ☐ Check Part No./Kit is correct
2. ☐ Read through instruction before installing
3. ☐ Fit roof rack accessory
4. ☐ Check and recheck all fasteners are secure

Maximum carrying capacity: Up to 100kg (220lbs) including the weight of the rack system**.**
Please refer to your vehicle manufacturers handbook for maximum carrying capacity. Always use the lower of the two figures. Load must be evenly distributed over the entire basket.

Warning: Do not attempt to fit the rack system to your vehicle unless you fully understand these fitting instructions. Please direct any questions regarding fitting to the dealer from where the roof racks were purchased.

Use only non-stretch fastening ropes or straps.

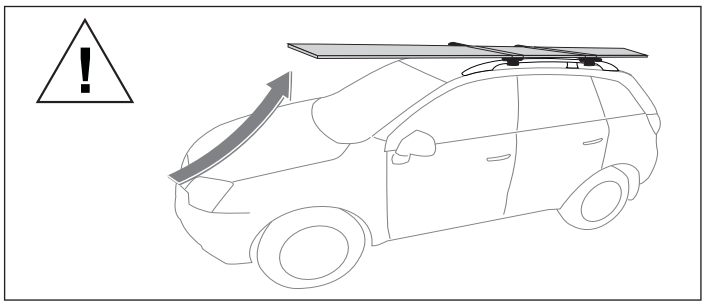
Recommendations: It is essential that all bolt connections be checked after driving a short distance when you first install your roof racks. Bolt connections should be checked again at regular intervals (once a week is enough, depending on road conditions, usage, loads and distances travelled). You should also check the roof racks each time they are re-fitted. Always make sure to fasten your load securely. Please also ensure that all loads are evenly distributed and that the centre of gravity is kept as low as possible and must be entirely contained within the extents of the roof racks. **Rack System must be removed when putting vehicle through an automatic car wash.**

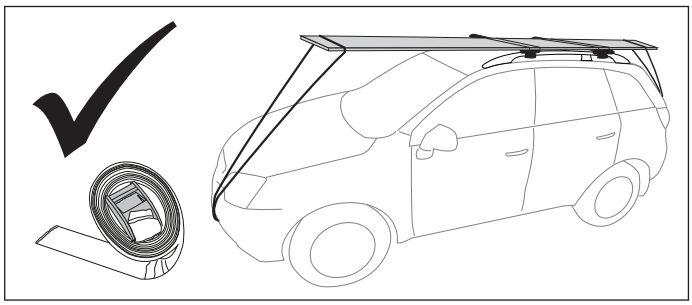
Caution: The handling characteristics of the vehicle changes when you transport a load on the roof. For safety reasons we recommend you exercise extreme care when transporting wind-resistant loads. Special consideration must be taken into account when cornering and braking.

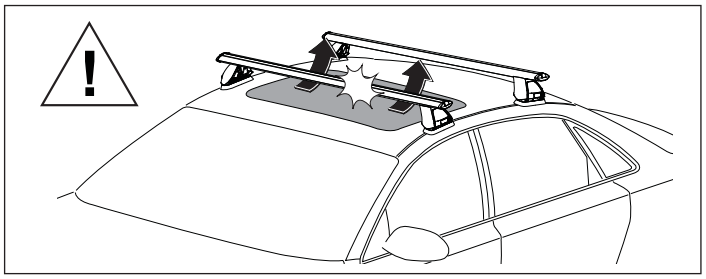
Off-road use:
The Roof Rack System may be used in off road applications, however a safety factor of 1.5 is enforced. That is, maximum permissible off road load is **66kg (145lbs).** Although the crossbars are tested and approved to AS1235-2000/ 15011154, off-road conditions can be much more rigorous. Extreme car must be taken in off road conditions

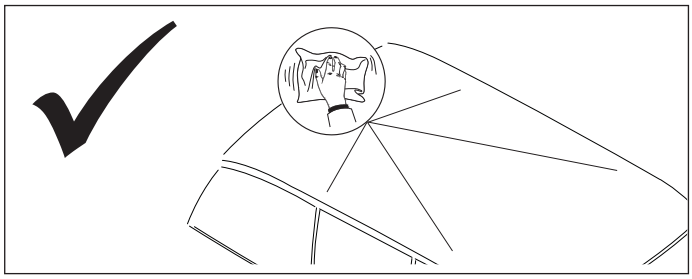
Note for Dealers and Fitters:
It is your responsibility to ensure these fi tting instructions are given to the end user or client.

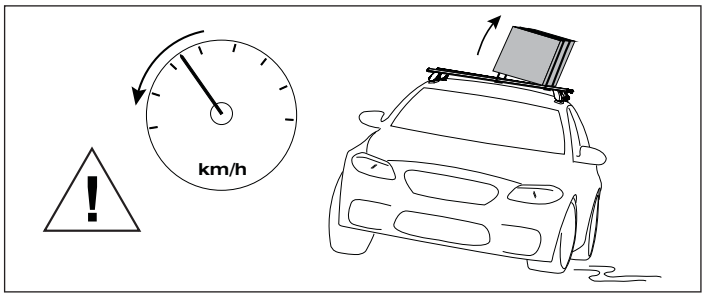
RCL, RCH 2,4,6 Kits

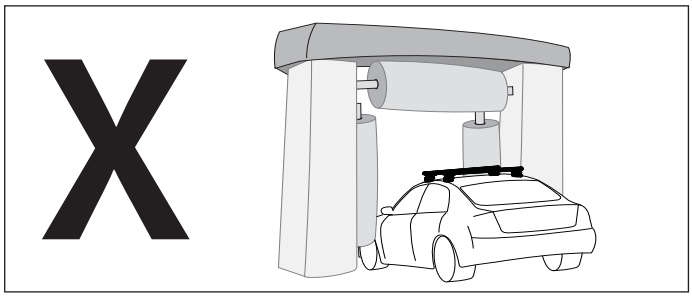




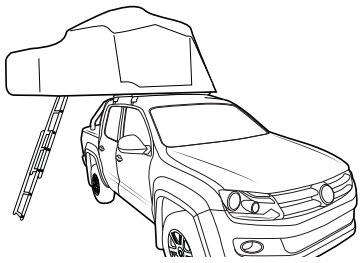




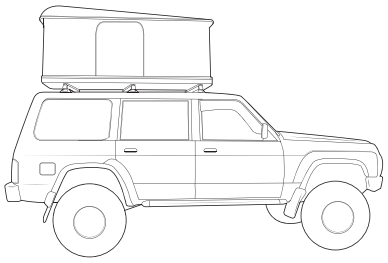




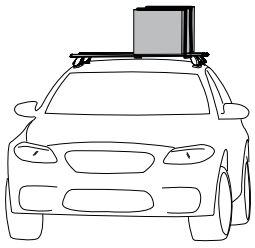
Ensure Ladder is well supported on the ground to help support tent. Take extreme caution when climbing heights above 1.2m/4ft.



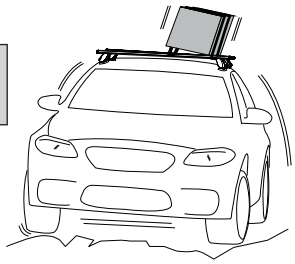
It is required for Clam Shell Roof Top Tents to use a 3 Crossbar System.



When these roof racks are to be used on a vehicle that is driven off sealed roads, the manufacturer maximum roof load rating (to be found in the vehicles User Manual) should be ***divided by 1.5***. Do not forget to subtract the complete crossbar system weight from your maximum carrying capacity.

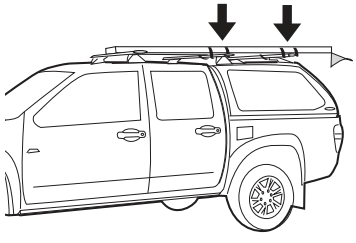


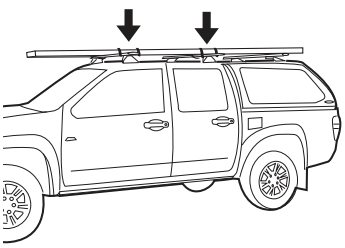
100kg/220lbs (Urban Road)	=	***66kg/145lbs*** (Off Road)



WARNING! Important Load Carrying Instructions

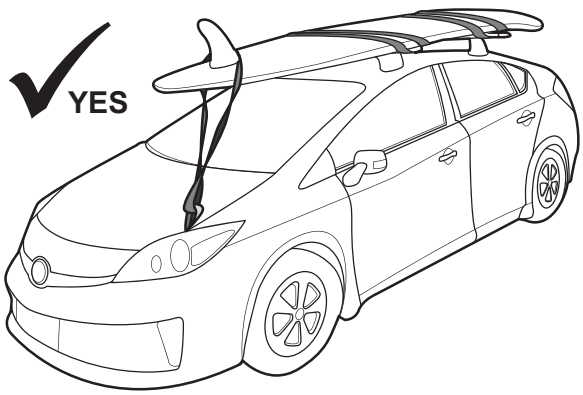
With utility vehicles, the cabin and the canopy move independently. Roofracks and vehicle can be damaged if the item transported is rigidly fixed at points on both the cabin and canopy. Instead, rigidly fix to either the cabin roofracks or the canopy roofracks.





Paddle/ Surfboards should be fixed to the front of the vehicle.

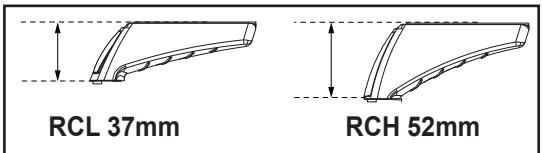
YES

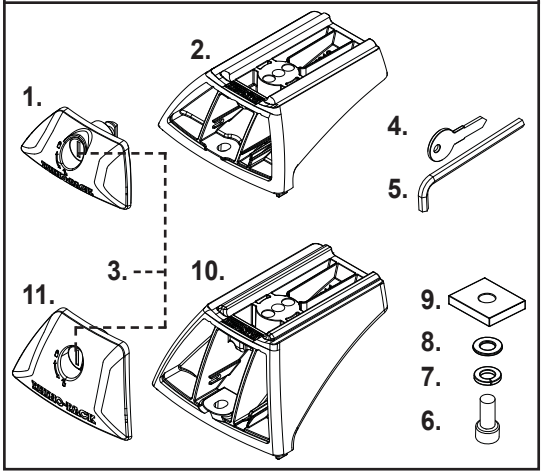


RCL, RCH 2,4,6 Kits

Parts List

Item	RCL	2 Kit Qty	4 Kit Qty	6 Kit Qty	Part No.
1	Locking Leg Cover (37mm)	2	4	6	M810
2	Locking Leg Base (37mm)	2	4	6	M813
3	Key Barrel	2	4	6	CA1339
4	Key	1	2	2	-
5	Allen Key	1	1	1	H034
6	M6 x 20mm Socket Head Screw	2	4	6	B054
7	M6 Spring Washer	2	4	6	W004
8	M6 x 16mm Flat Washer	2	4	6	W031
9	M6 Nut 30mm x 25mm	2	4	6	N035A
10	Instructions	1	1	1	R1182
Item	**RCH**	**2 Kit Qty**	**4 Kit Qty**	**6 Kit Qty**	**Part No.**
10	Locking Leg Cover (52mm)	2	4	6	M812
11	Locking Leg (52mm)	2	4	6	M811
3	Key Barrel	2	4	6	CA1339
4	Key	1	2	2	-
5	Allen Key	1	1	1	H021
6	M6 x 20mm Socket Head Screw	2	4	6	B054
7	M6 Spring Washer	2	4	6	W004
8	M6 x 16mm Flat Washer	2	4	6	W031
9	M6 Nut 30mm x 25mm	2	4	6	N035A
10	Instructions	1	1	1	R1182



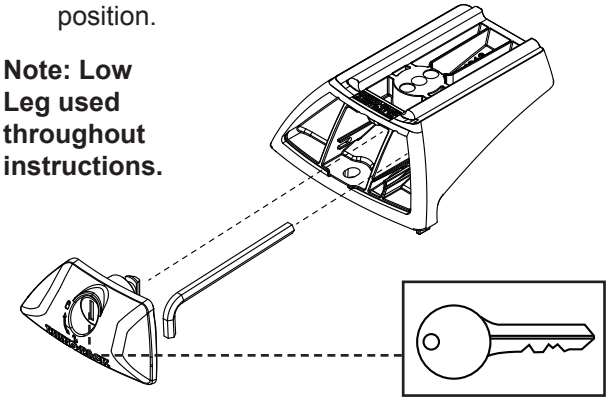


Tools Required:
Allen Key (provided).
Metal Key (provided).
Notes:
Crossbars and Fit Kits are sold as separate and are required for individual vehicle fits.
Heavy Duty Bars will require a QMHD05 kit.

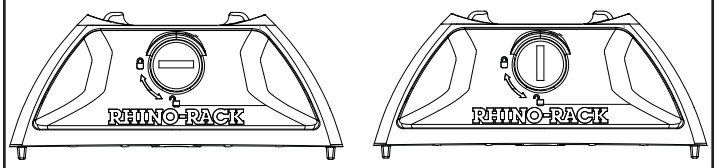
Instructions

1 Use the Metal Key provided to unlock the Cover Plate and remove. Remove the Allen Key from its storage position.

Note: Low Leg used throughout instructions.

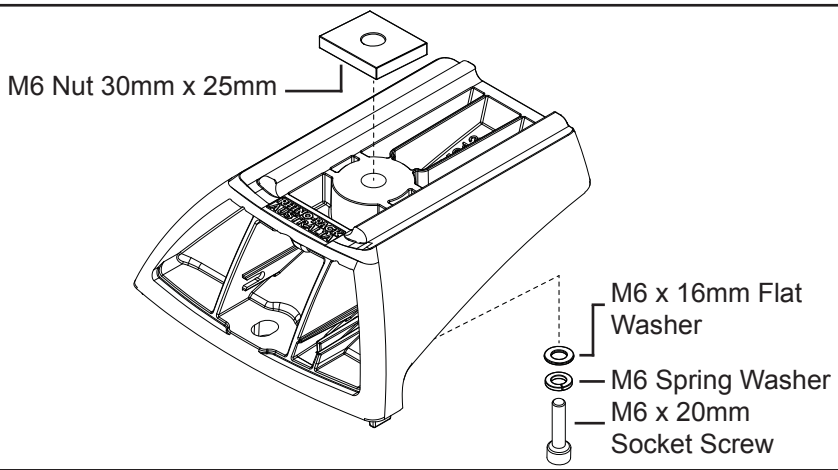


Front View:



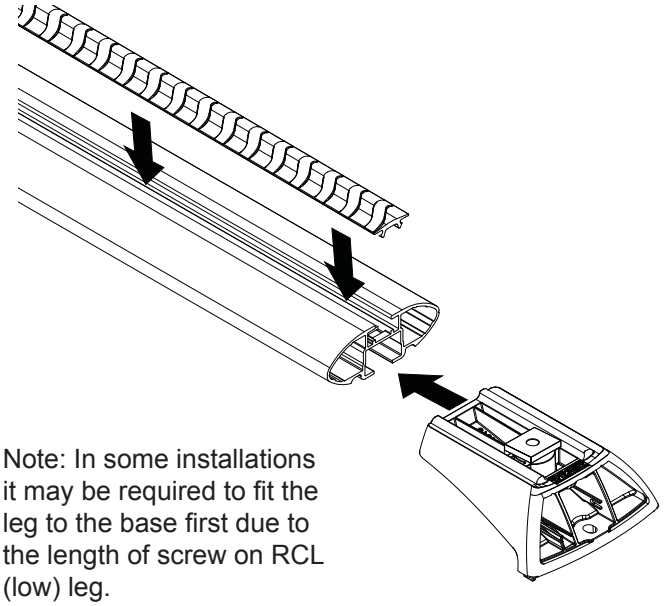
Closed Open

2 Insert the M6 hardware as shown. Finger tighten only at this stage.



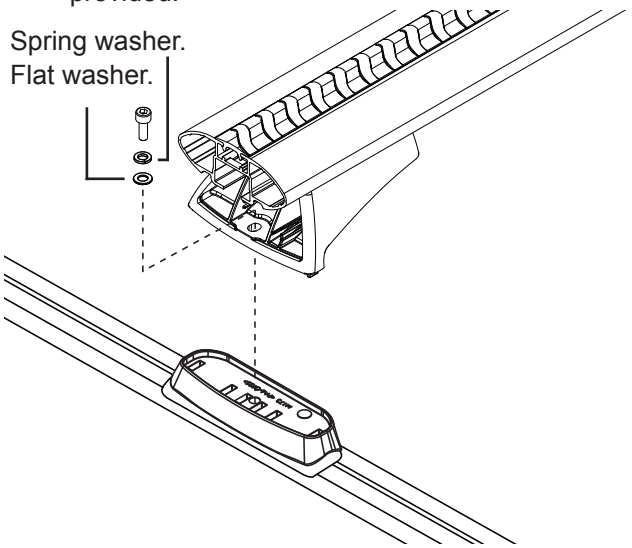
RCL, RCH 2,4,6 Kits

3 Slide the Assembled legs into the Crossbars as shown. Insert Vortex Rubber, cut to length as required.



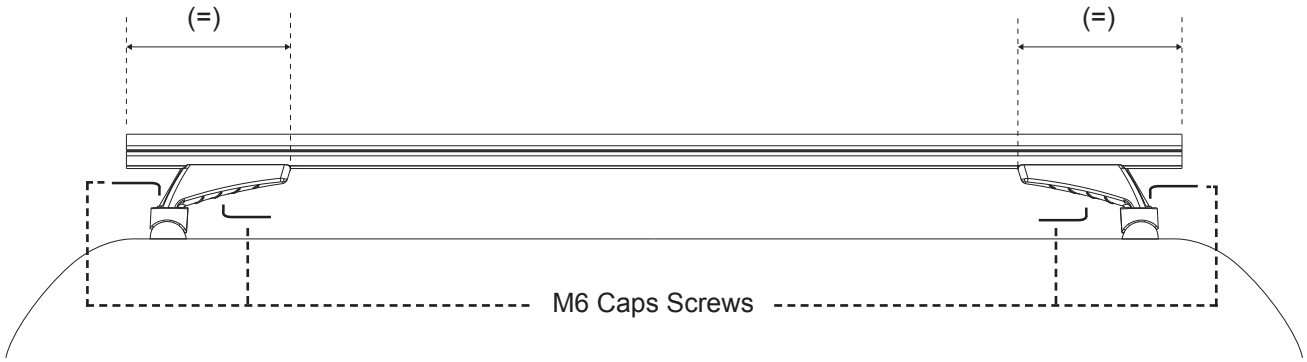
Note: In some installations it may be required to fit the leg to the base first due to the length of screw on RCL (low) leg.

4 Fix the Crossbars to the vehicle specific Base Kit that has been purchased, using the Allen Key provided.

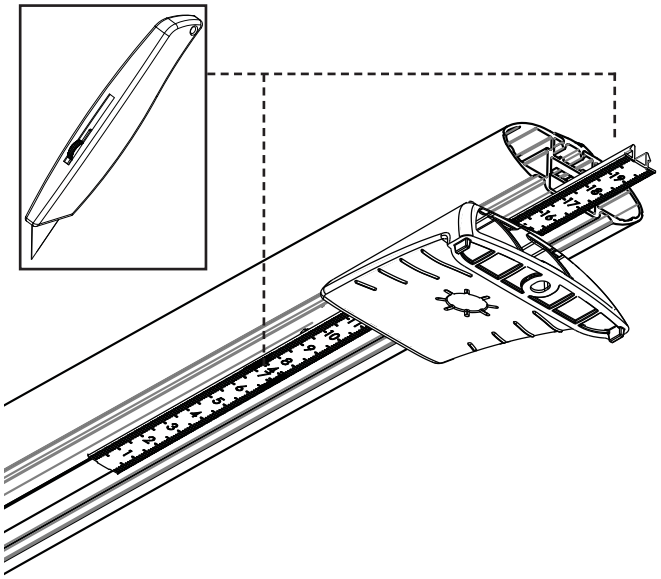


Note: Images are example only. RCL/RCH legs can be fit to either tracks or pads. Pads and track fit kits are sold as separate.

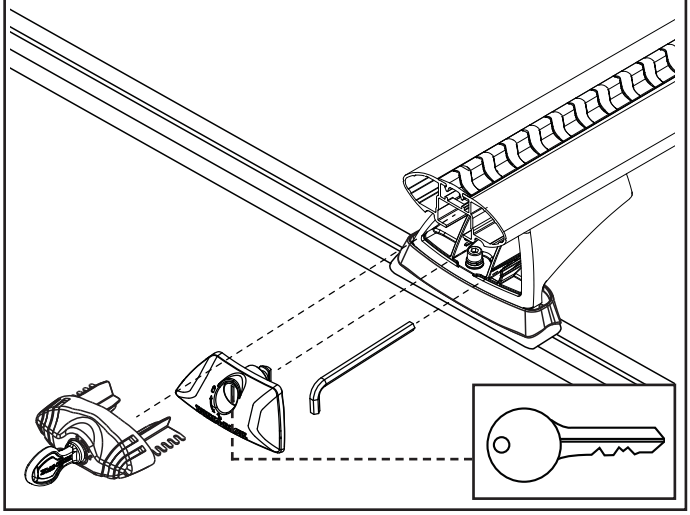
5 Ensure the Crossbars have an equal overhang. Tighten the M6 Leg Hardware with the Allen Key provided.



6 Insert the Underbar Strips into the slots either side of the installed Leg. Cut to length as required.

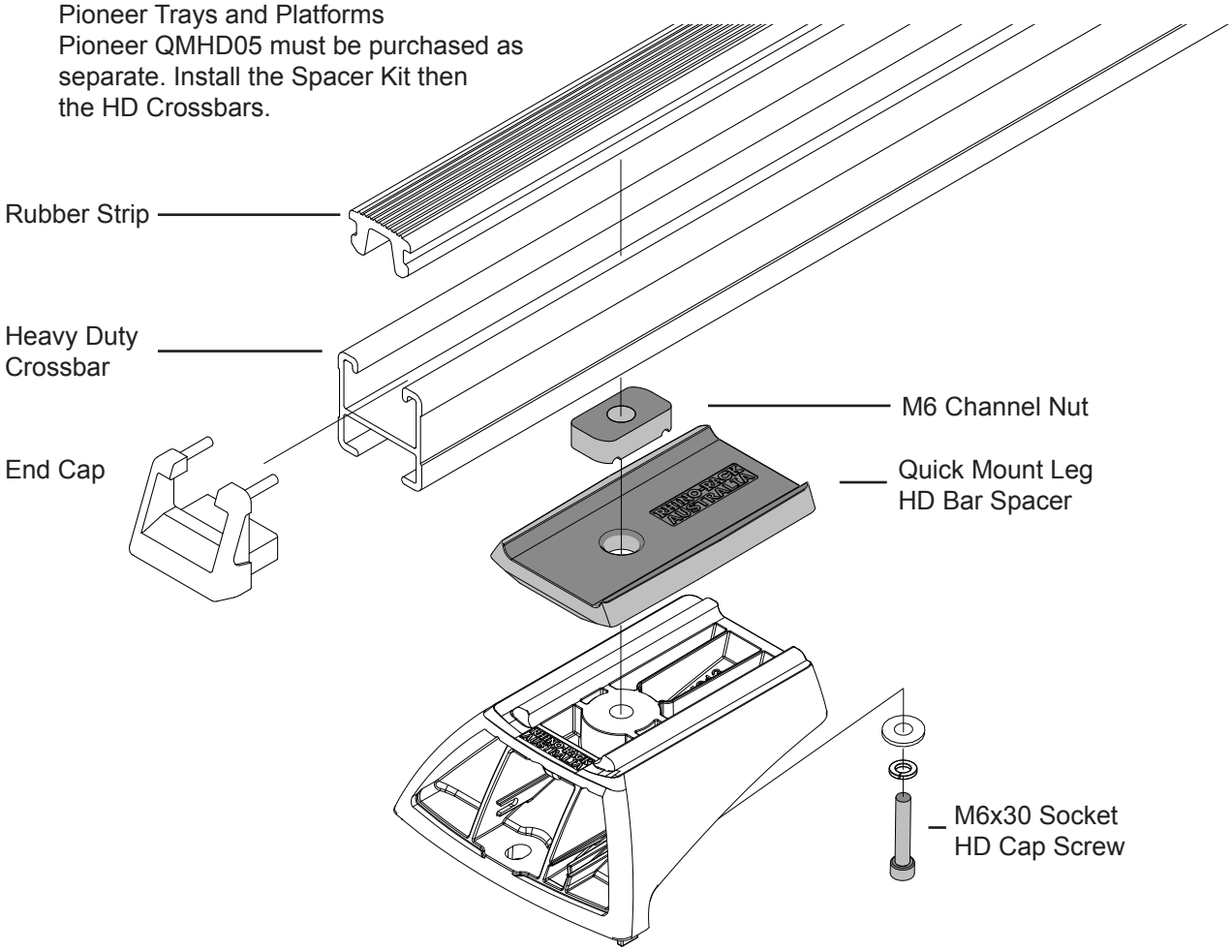


7 Insert the Crossbar End Caps and lock in place. Replace the Allen Key and Leg Cover. Lock the Leg Cover Plate with the key provided. Be sure all fixtures are secure before use.

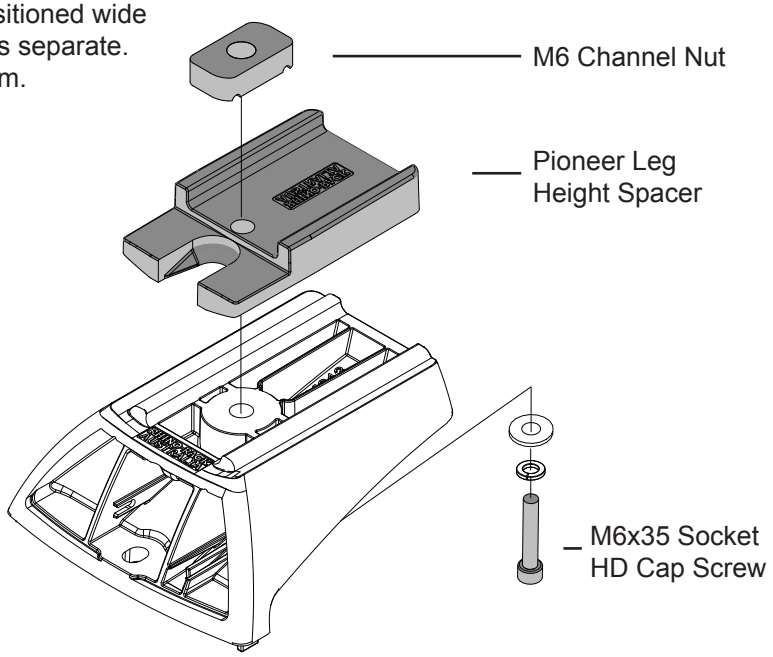


RCL, RCH 2,4,6 Kits

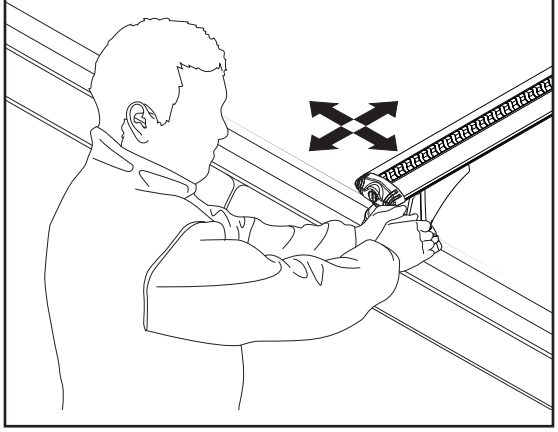
Note To fit Legs to Heavy Duty Crossbars, Pioneer Trays and Platforms Pioneer QMHD05 must be purchased as separate. Install the Spacer Kit then the HD Crossbars.



To fit Legs to Pioneer Trays/ Platforms, positioned wide on vehicle, QMPS10 must be purchased as separate. Install the Spacer Kit then the Tray/ Platform.



Check all fixtures are secure before use.



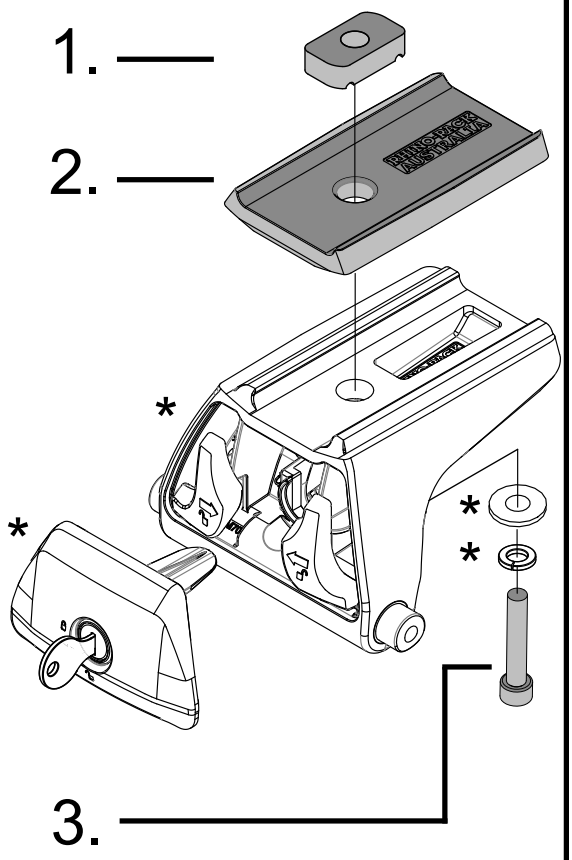
RHINO-RACK

QMHD05

Item	Component Name	Qty	Part No.
1	M6 Channel Nut	2	N002
2	Quick Mount Leg HD Bar Spacer	2	M709
3	M6x30 Socket HD Cap Screw	2	B047
4	Instructions	1	R569

***Note:**
RLT600 Parts as seperate.
Fix the Quick Mount Spacer to the Leg using the hardware in the leg kit. The bolts found in the spacer kit will replace the original in the leg kit.

Tools Required:
5mm Allen Key



Note: Max Spacer height 30mm

Issue: 03 Document No: R569 Prepared: Kayle Everett

Learn more about roof racks and cargo carriers we have.